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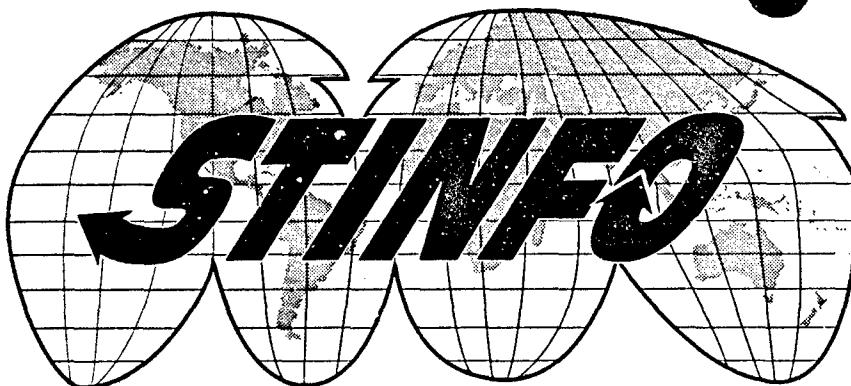


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DoD STINFO Manager Training Course

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Training Manual

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Defense Technical Information Center (DTIC)
Cameron Station
Alexandria, Virginia 22304-6145

February 1993



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Final Report

DoD STINFO Manager Training Course.
Training Manual

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This manual is intended to be used as an internal training guide for newly appointed Scientific and Technical Information (STINFO) Managers. It covers the principal elements of the DoD Scientific and Technical Program (STIP), including the Work Unit Information System (WUIS), control and marking, dissemination, and technology transfer. The manual is the basis for DTIC's DoD STINFO Manager training course. Attendance at the training course includes the training manual and the STINFO Documentation binder.

*STINFO, STINFO Training,
*Instruction Manuals, Handbooks, Training,
Training Devices, DOD STIP, Technology Transfer

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**DOD STINFO MANAGER TRAINING COURSE
TRAINING MANUAL**

FOREWORD

This manual is intended to be used as an internal training guide for newly appointed Scientific and Technical Information (STINFO) Managers. It covers the principal elements of the DoD Scientific and Technical Information Program (STIP), including the Work Unit Information System (WUIS), control and marking, dissemination, and technology transfer. The manual is the basis for DTIC's DoD STINFO Manager training course. Attendance at the training course includes the training manual and a STINFO Documentation binder.

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Acknowledgment

This manual is intended to be used as an internal training guide for new STINFO Managers. The Air Force and Army STINFO training notes prepared by Mr. Charlie Maiorana, INFO/tek, form the basis for this manual. Other sources used to develop this manual include regulations, handbooks, DTIC publications, and other written material and invaluable guidance received from DoD STI personnel.

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1. INTRODUCTION

1.1 GOAL

This course is designed to train the newly appointed STINFO Manager in the requirements of the DoD Scientific and Technical Information Program (STIP) so that he or she can carry out the responsibilities and duties on the local activity level.

1.2 OBJECTIVES

By the end of this course, participants will have:

1. An awareness of the complete spectrum of STINFO duties.
2. Sufficient guidance to carry out these duties.
3. A complete set of major STINFO documentation to take back to the office.
4. An introduction to some management skills.

1.3 TRAINING METHODS

The course is divided into modules that cover a single topic or related topics that are pertinent to the STINFO Manager's responsibilities. The topics are covered in the training manual. Each topic includes:

1. Key points.
2. A review of the supporting documentation.
3. Discussion.

There will also be exercises, videos, and a few guest speakers.

1.4 WHAT IS IN A NAME?

The STINFO language includes a large number of acronyms that will be used throughout this course. Chapter 20 is an introduction to the STINFO terminology. The following three acronyms will definitely be part of your vocabulary by the end of this course:

STI	- Scientific and Technical Information
STINFO	- Scientific and Technical Information (Officer)
STIP	- Scientific and Technical Information Program

A STINFO Manager may be defined as the focal point at a DoD activity who manages the STI produced by the organization under the policy direction of the DoD STIP.

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The Air Force and Army use the term STINFO Manager. In the current draft of SECNAVINST 3900.43, *Navy Scientific and Technical Information Program (STIP)*, the term STIP Focal Point is used. There may be a variety of local offices and personnel involved in the management of STI, but the requirements under the DoD STIP remain the same. The purpose of this course is to learn about the responsibilities and duties of a STINFO Manager. The recommendation is to have such a management focal point at the organization.

1.5 COURSE AGENDA

		Est. Time
DAY 1		
Module 1:	Introduction and Training Material	1 1/2 hr.
Module 2:	Regulations	1 hr.
Module 3:	STINFO Terminology	1 hr.
Module 4:	DoD STIP and Military Services STINFO Programs	1 hr.
Module 5:	STINFO Manager Responsibilities and Duties - Overview	1 1/2 hr.
DAY 2		
Module 6:	Work Unit Information System (WUIS).....	2 hr.
Module 7:	Technical Publications Program - Tracking, Processing and Disseminating	2 hr.
Module 8:	Controlling and Marking Technical Information.....	2 hr.
DAY 3		
Module 9:	Defense Technical Information Center (DTIC)	2 hr.
Module 10:	User Support - Other	1 hr.
Module 11:	Liaison and Coordination.....	1 1/2 hr.
Module 12:	Management, Promotion, and Training	1/2 hr.
Module 13:	Wrap-Up	1 hr.

2. REGULATIONS

KEY POINTS

- DoD and the military services regulations are important to the management of STINFO programs.
- As the STINFO Manager, you should:
 - Obtain copies of the regulations that are relevant to your particular program.
 - Have them readily available for your use and others.
 - Read and understand the governing regulations and be familiar with the relevant ones.
 - Use the regulations to help develop local guidance in the form of regulations, instructions, handbooks, memos, etc.
- Various DoD and military services regulations will be discussed throughout this course. Copies of most of these regulations are found in the STINFO Documentation binder of your training material.

Fundamental to this course are a number of DoD and military services publications, such as directives, instructions, regulations, and pamphlets. The purpose of each of these publications varies, but each includes one or more of the following responsibilities:

1. Establishes programs, policies, or organizations.
2. Provides authority.
3. Defines missions or concepts.
4. Assigns responsibilities or duties.
5. States general or specific procedures.
6. Provides guidance.

In other words, each describes why, what, and how. These publications are commonly known as “regulations”. Let’s take a look at these “regulations” and learn how to obtain them.

2.1. DOD REGULATIONS

DoD issues a large number of directives, instructions, and publications, and there is an active program to consolidate these regulations. The documents are numbered according to the following eight major subject groups:

- 1000 - Manpower and Personnel
- 2000 - International and Foreign Affairs
- 3000 - Plans and Operations, Research and Development, Intelligence, and Computer Language
- 4000 - Logistics, Acquisition, and Natural Resources
- 5000 - Acquisition and Administrative Management, Organizational Charters, Security, and Public and Legislative Affairs

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6000 - Health

7000 - Budget, Finance, Audits, and Information Control

8000 - Information Management

Each of these subject groups has first and second level breakdowns. For example, under *Plans and Operations, Research and Development, Intelligence, and Computer Language*, the first level breakdown consists of:

3000 - 3199 Plans and Operations

3200 - 3299 Research and Development

3300 - 3399 Intelligence

3400 - 3499 Computer Language

3500 - 3599 Space Systems and Programs

Under *Research and Development*, the second level breakdown is:

3200 - General

3201 - Laboratories

3210 - Research Grants

3216 - Biological Research

3222 - Electromagnetic Compatibility and Electronic Warfare

3224 - Equipment and Supplies

Thus we know that DoD Directive 3200.12, *DoD Scientific and Technical Information Program*, is a *General* directive dealing with *Research and Development*. We will be discussing this regulation later in this course.

There are a number of regulations, manuals, handbooks, pamphlets, etc., that implement or supplement DoD directives and instructions. These are identified by the directive number followed by a letter, such as R, M, PH, that is sometimes followed by a sequence number. For example, DoD 3200.12-R-1 is a regulation associated with DoD Directive 3200.12.

Most of the DoD regulations discussed in this course are from the 3000 and 5000 series.

A listing of all DoD directives, instructions, and publications and their changes is contained in the *DoD Directives System Annual Index (DoD 5025.1-I)*, which is issued annually in January and updated quarterly. This document lists the titles of all current documents by number and subject and indicates date issued and Action Officer and telephone number. If applicable, the National Technical Information Service (NTIS) accession number and *Code of Federal Regulations (CFR)* Part Number are indicated. The listing of the CFR Part Number indicates that the publication has been codified in Title 32.

DoD directives requiring direct action by the military services are implemented by a series of Air Force, Army, and Navy regulations. The DoD directives are often included as enclosures to the military services regulations. In addition, implementing regulations are issued by activities at the local level.

2.2 AIR FORCE REGULATIONS

Air Force regulations, manuals, and pamphlets are organized into "series", which correspond roughly to a single topic. The 80 series contains the documents relating to *Research and Development* while the 83 series contains the documents relating to *Scientific and Technical Information*. The governing regulation for the AF STINFO program is found in the 83 series. The 80 series regulations that are pertinent to the STINFO program are being gradually moved into the 83 series.

A listing of all Air Force publications is contained in the *Numerical Index of Standard and Recurring Air Force Publications (AFR 0-2)*, which is updated quarterly. It is arranged by series and lists publication number, date issued, title, Office of Primary Responsibility (OPR), number of pages, and distribution type.

USAF and Command bulletins announce revisions, additions, and changes to regulations that occur between updates of the quarterly index.

The names and formats of Air Force regulations are changing. They are to be replaced by policy directives and instructions. A policy directive contains policy statements, explanations of key terms, responsibilities and authorities, and measurement techniques. An instruction is the "how-to document" and contains specific and detailed procedural guidance.

2.3 ARMY REGULATIONS

As with Air Force publications, Army regulations, manuals, and pamphlets are organized into "series", which correspond roughly to a single topic. The 70 series contains the documents relating to *Research, Development, and Acquisition*. The governing regulation for the Army STINFO program is found in the 70 series, and most of the other pertinent regulations are also found in this series.

A listing of all Army publications and forms is contained in the *Consolidated Index of Army Publications and Forms (DA PAM 25-30)*, which is published annually and updated quarterly as needed. It is arranged by series and lists publication number, date issued, title, and proponent. The index is available only on microfiche.

2.4 NAVY REGULATIONS

The Navy publishes its regulations as instructions, which are issued by the various commands. A number of pertinent regulations for the Navy STI program, including the governing one, are issued by the Office of the Secretary of the Navy (SECNAV).

There are two microfiche listings of Navy publications and forms: a) *Navy Stock List of Publications and Forms (NPFC PUB 2002F)*, the public release version, and b) *Unabridged Navy Index of Publications and Forms (NPFC PUB 2002D)*, the limited distribution version. Both versions are issued three times a year. Section four, *Navy Departmental Directives*, lists instructions by command acronym. The publication number, stock number, title, and date issued are listed.

2.5 HOW TO OBTAIN MILITARY REGULATIONS

DoD and military services publications, as well as the indexes discussed earlier, may be obtained through their respective publications channels. Both the Air Force and Army have publishing distribution centers, while DoD has a system of stocking points. The Navy has the Navy Publications and Forms Center (NAVPUBS), which was disestablished on 3 April 1991 and consolidated into the Navy Aviation Supply Office (ASO), Philadelphia, PA. ASO Naval Publications and Forms stocks a number of DoD and military services publications but no longer handles DoD directives and instructions. For your information, the Defense Printing Service (formerly Navy Publishing and Printing Service) maintains the DoD Single Stock Point for military specifications and standards.

NTIS sells military publications from all three services and DoD. The indexes discussed earlier may be ordered on a subscription basis. DoD directives and instructions are now available from NTIS. The agency will accept orders for all public release items that are listed in the indexes. Since NTIS does not stock the publications, orders are placed through the various military publications channels.

3. THE DOD SCIENTIFIC AND TECHNICAL INFORMATION PROGRAM (STIP)

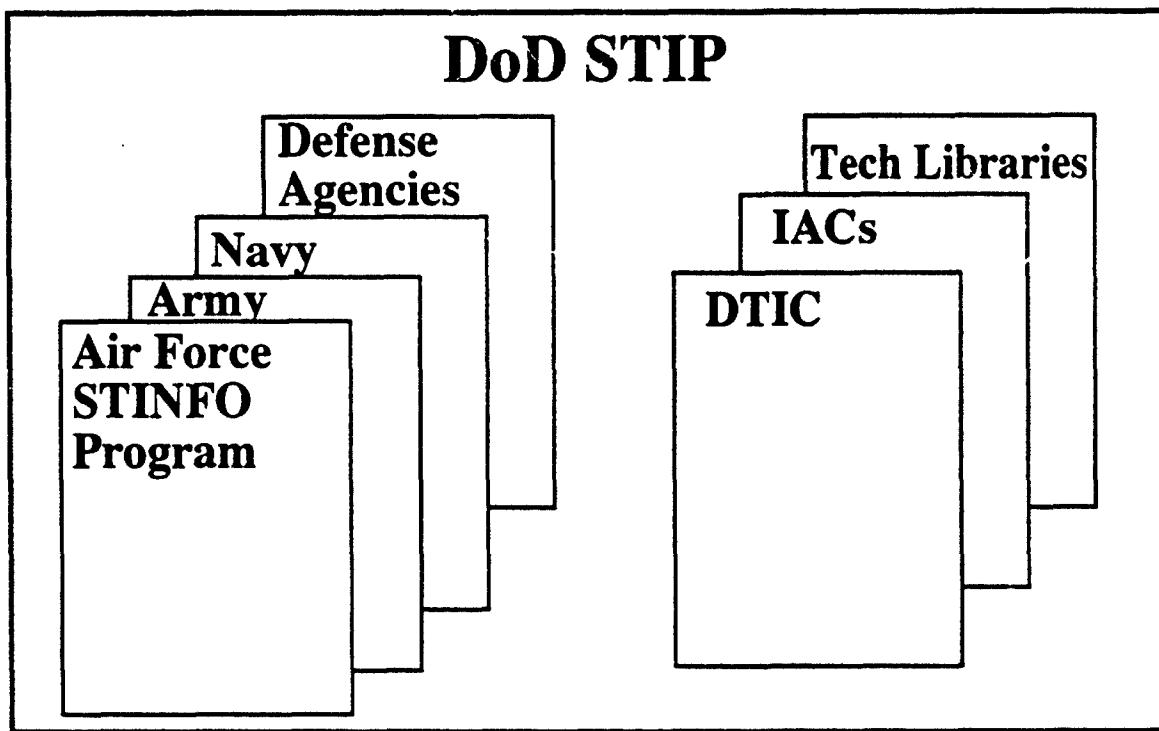


Figure 1 - DoD STIP Umbrella

KEY POINTS

- The DoD STIP is the “umbrella” under which all scientific and technical information programs within DoD Components operate. DoD Components include the Office of the Secretary of Defense, the Joint Chiefs of Staff, the Military Departments, and the Defense Agencies.
- The Director of Acquisition Policy & Program Integration (AP&PI), who reports to the Under Secretary of Defense for Acquisition, manages the DoD STIP.
- DoD Directive 3200.12, *DoD Scientific and Technical Information Program*, is the governing directive. The scope and concepts of the DoD STIP are defined; the functional responsibilities of the Under Secretary of Defense, Acquisition and the Heads of the DoD Components are specified; and the mission and functions of the Defense Technical Information Center (DTIC) are outlined. The directive is currently under revision.
- Three regulations and one manual are authorized: DoD 3200.12-R-1, *Research and Technology Work Unit Information System*; DoD 3200.12-R-2, *Centers for Analysis of Scientific and Technical Information*; DoD 3200.12-R-4, DoD Domestic Technology Transfer Program; and DoD 3200.12-M-1, *WUIS Input Manual (Draft)*. Some of these are currently under revision.
- Studies programs are included under the DoD STIP and controlled by DoD Directive 4205.2, *Acquiring and Managing Contracted Advisory and Assistance Services (CAAS)*.

- The STIP does not cover DoD programs for the handling of communications and display of information relating to the command and control of operations and operational forces; the DoD scientific and technical intelligence production community and their products; technical documents containing classified scientific and technical intelligence; the DoD technical data management program; and signals intelligence and communications security information.
- The STINFO programs within the Military Departments and Defense Agencies exist to support the DoD STIP, and therefore, the goals and responsibilities of both are the same. As such, a basic understanding of the DoD STIP will help one appreciate the many aspects of the STINFO Manager's job.

Copies of the cited directives and three regulations are found in the STINFO Documentation binder of your training material.

3.1 GOALS AND RESPONSIBILITIES

The following discussion of the DoD STIP uses actual language taken from DoD Directive 3200.12.

The STIP is a coordinated structure of STI functions. The overall objective of the DoD STIP is to increase the effectiveness of the scientific and technical effort in the DoD community. The primary goals of the STIP are to ensure that DoD scientific and technical information:

1. Provides maximum contribution to the advancement of science and technology.
2. Permits timely, effective, and efficient conduct and management of DoD research, engineering, and studies programs.
3. Eliminates unnecessary duplication of effort and resources by encouraging and expediting the interchange and use of STI. This interchange is within and among DoD Components and their contractors, federal agencies and their contractors, and the national and international scientific and technical community, within established release controls.

The responsibilities for carrying out the DoD STIP are divided between (a) the Under Secretary of Defense, Acquisition and OSD Staff who have supervisory, coordination, and review functions and (b) the Heads of DoD Components who have specific functional responsibilities. Of these two sets of responsibilities, the second set is of the greatest interest because many of the STINFO Manager's duties support these responsibilities.

The 10 STIP functional responsibilities of the Heads of DoD Components are to:

1. Designate a senior-level STI director or manager at the Military Department or Defense Agency staff level.
2. Continually review their needs for STI.
3. Establish, operate, and administer those STI functions and activities required for the conduct of their missions.
4. Provide programming, budgeting, funding, accounting, reporting, and other support for their STI activities.

5. Maintain a current review and inventory of STI functions and activities under their administrative control.
6. Encourage the use and sponsorship of and participation in technical symposia and meetings by DoD scientists, engineers, and managers as an effective mechanism for STI transfer and exchange.
7. Execute technology transfer programs and projects and assign single points of contact to coordinate their technology transfer programs.
8. Ensure that all significant scientific or technical observations, findings, recommendations, and results derived from DoD endeavors, including those generated under contracts or grants, are recorded as technical documents. Procedures shall ensure that copies are made available to the DoD R&E community, including technical libraries, the DTIC, and appropriate IACs, and, within established security and other limitation control, to the civilian scientific and technical community. Such documentation shall be prepared and distributed without undue delay and according to established standards for document format, distribution, security marking, and reproducibility. If physical control and secondary distribution of a technical document by an STI function, such as the DTIC or an IAC external to the authoring or sponsoring activity, is not appropriate, a bibliographic description is required to report the nature and existence of the document.
9. Operate and support activities for the input of data to centralized DoD databases of bibliographic and R&E program-related information, and be responsible for the accuracy and currency of database content and reporting.
10. Within security and distribution limitations, policies, and guidelines, ensure that STI is provided for public use in an unclassified manner to the maximum extent possible.

3.2 DEFENSE TECHNICAL INFORMATION CENTER (DTIC)

The mission, responsibilities, and functions of DTIC are outlined in enclosure 3 of DoD Directive 3200.12. DTIC is the central source of STIP support in the DoD, and DTIC has the overall mission for acquiring, storing, retrieving, and disseminating STI. Six functions are outlined in enclosure 3:

1. Centralized DoD Document Services
2. Centralized DoD Database Services
3. DoD Information Analysis Center (IAC) Support
4. DoD Technical Library Support
5. Investigation, Experimentation, and Application of Advanced Information Science and Technology
6. Related STI Support Services

The role of DTIC within DoD is changing. Its customer base has been expanded beyond the RDT&E community, and DTIC now supports the entire DoD Acquisition Program, including senior-level managers. We will be discussing the role that DTIC plays in the DoD STIP throughout this course. Its products and services are discussed in Chapter 12.

4. THE MILITARY SERVICES STINFO PROGRAMS

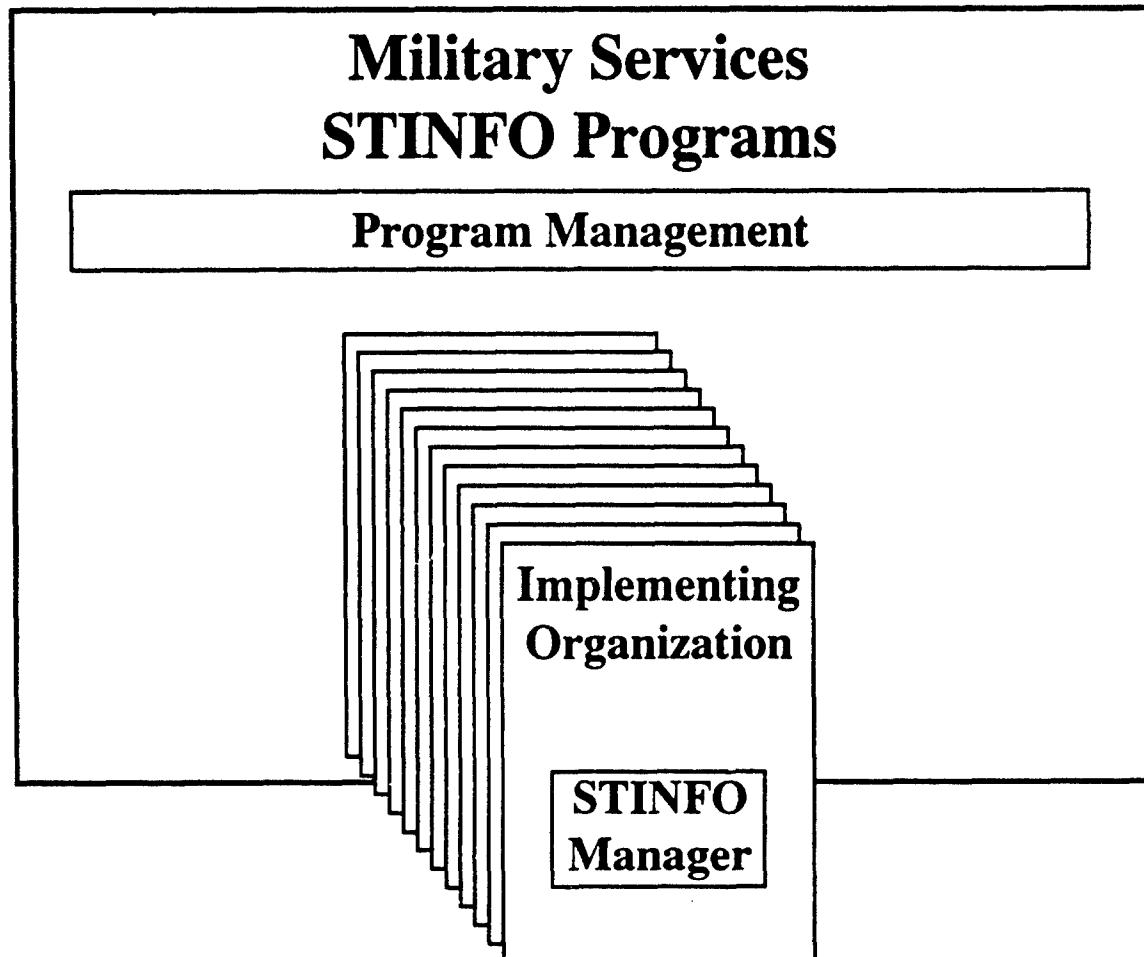


Figure 2 - Military Services STINFO Programs

KEY POINTS

- The Air Force, Army, and Navy STINFO programs implement DoD Directive 3200.12.
- AFR 83-1, *U.S. Air Force Scientific and Technical Information Program*, is the governing regulation for the AF STINFO program. It was revised in FY92 and will become a policy directive (AFPD 83-1) in FY93. There are a number of supporting STINFO regulations.
- AR 70-45, *Research, Development, and Acquisition Scientific and Technical Information Program*, is the governing regulation for the Army STINFO program. It is currently in draft form and will replace seven current Army STINFO regulations.
- SECNAVINST 3900.43, *Navy Scientific and Technical Information Program (STIP)*, is the governing regulation for the Navy STI program. It is currently in draft form. There are a number of supporting regulations that are issued by the Secretary of the Navy (SECNAV), Office of the Chief of Naval Operations (OPNAV), and others.

- The responsibilities and duties among the STINFO programs of the three services are very similar. The Air Force and Army regulations provide specific information about their STINFO program requirements. The Navy regulation provides general information, but the current draft states three specific STIP requirements (actions).

The overall purposes and goals of the Air Force, Army, and Navy programs are the same:

1. To implement DoD Directive 3200.12.
2. To make participation in the STIP program service-wide and to mandate responsibilities down the chain of command.
3. To seek new and more effective ways of collecting, producing, disseminating, controlling, protecting, and applying scientific and technical information.
4. To provide for the rapid and effective interchange of scientific and technical information within and among DoD Components, other federal agencies, contractors, and the national and international scientific and technical community, within established release controls.
5. To support and use the services of the Defense Technical Information Center (DTIC).
6. To make the maximum impact possible on DoD and national R&D efforts.

Because the Air Force and Army are very specific about program requirements, it will help our understanding of the STINFO program if we look at their regulations. The next several chapters address the two service programs by reviewing AFR 83-1 and supporting regulations and AR 70-45.

First, we will consider the policies, objectives, and goals of the two STINFO programs. We will then consider the responsibilities of the higher command levels. Finally, we will carefully consider the responsibilities and duties of the local STINFO Manager. We will be discussing these responsibilities and duties in depth throughout this course.

Copies of AFR 83-1, AR 70-45, and SECNAVINST 3900.43 are found in the STINFO Documentation binder of your training material.

5. AIR FORCE (AF) STINFO PROGRAM

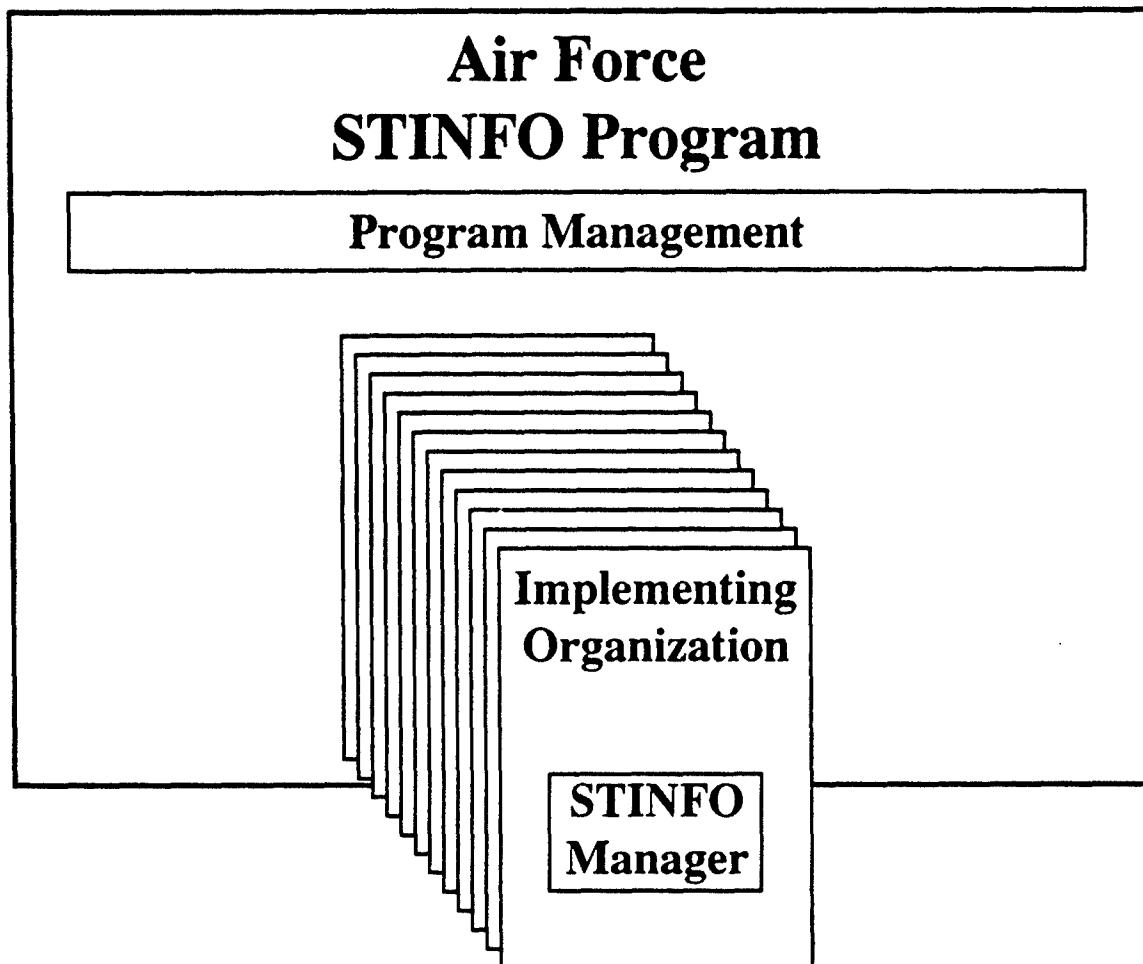


Figure 3 - Air Force STINFO Program

The AF STINFO program is an integral part of the DoD STIP, implementing DoD Directive 3200.12. AFR 83-1, *U.S. Air Force Scientific and Technical Information Program*, governs the AF STINFO program and describes the program and its concept, goals, participation, and responsibilities at three levels, Program Manager, Implementing Organization, and the local STINFO Manager. The regulation consists of:

1. A description of the AF STINFO program.
2. A list of the program goals.
3. A list of the participation requirements.
4. A list of the Program Manager responsibilities.
5. A list of the Implementing Organization responsibilities.
6. A list of the local STINFO Manager duties.
7. An evaluation checklist.

AFR 83-1 was revised in FY92 and will become a policy directive (AFPD 83-1) in FY93. The revision mandates more specific oversight, training, and reporting responsibilities on all three levels and provides more explicit explanation of local STINFO Manager duties. **The regulation does not list specific procedures to be followed. These are covered in other regulations.**

There are presently nine regulations and one pamphlet in the 80 and 83 series that support the requirements of the AF STINFO program. A number of these are in revision or will be soon. In addition, most of these supporting regulations will become instructions in the new structure of Air Force publications. The goal is to have most of the pertinent regulations in the 83 series. Copies of the regulations, as well as a chart showing the revision plan, are found in the STINFO Documentation binder of your training material.

The following discussion of the AF STINFO program in Sections 5.1 and 5.2 uses actual language taken from AFR 83-1.

5.1. OBJECTIVES AND GOALS

The overall objective of the AF STINFO program is to ensure that all STI generated under Air Force research, development, test, engineering, technical, operational test and evaluation, and studies and analysis programs makes the maximum impact on DoD and national R&D efforts. To carry out this objective, the program provides for the interchange of scientific and technical information within and among Air Force organizations, DoD Components, federal agencies, government contractors, affiliated academic institutions, and the national and international scientific and technical, industrial, and academic community.

The specific goals of the program are:

1. Improve mission effectiveness.
2. Improve the scope and effectiveness of collecting, producing, disseminating, controlling, protecting, and applying scientific and technical information. The overriding priority of the STINFO program is to ensure that all scientific and technical data concerning Air Force research, engineering, and production efforts are reviewed for controlled dissemination and are rapidly and effectively exchanged.
3. Support the information needs of managers, analysts, scientists, engineers, and technicians.
4. Increase productivity and effectiveness of research and engineering programs.
5. Improve U.S. military capabilities through research and application of new technologies.
6. Maximize use of R&D and analytic resources.
7. Facilitate domestic technology transfer.

In fulfilling these goals, the AF STINFO program makes full use of the services of the Defense Technical Information Center (DTIC).

5.2. PROGRAM MANAGER RESPONSIBILITIES

HQ SAF/AQT (Office of the Assistant Secretary of the Air Force for Acquisition, Directorate for Science and Technology) is the Office of Primary Responsibility (OPR) for the Air Force STINFO program and appoints the Program Manager. The Program Manager is the single information focal point for the STINFO program, as required by DoD Directive 3200.12, and has the following responsibilities (with annotations):

1. Issue and maintain Air Force STINFO regulations. **A primary duty is to review and update the regulations.**
2. Coordinate the Air Force STINFO program with the Office of the Secretary of Defense, Contractor Data Management program, the Domestic Technology Transfer program, the Air Force Information for Industry program, the Foreign Disclosure Office, the Public Affairs program, the Technical Intelligence program, Air Force Library program, the Contracted Advisory and Assistance Service office, and pertinent portions of command and control programs, as well as with DTIC. **Essentially, to coordinate the program with all related information handling organizations.**
3. Review STINFO needs continually, and, as proper, make revisions to existing programs. **Plan for future needs, relationships with other programs, new types of STINFO, and make sure that the STINFO program accommodates changes as they occur.**
4. Develop a training program and train local STINFO Managers and develop and provide training materials to be used by these managers for local indoctrination. **Training is a key to the success of the program.**
5. Provide guidance to local STINFO Managers and other participants.

5.3. PARTICIPATION REQUIREMENT

Participation in the AF STINFO program is Air Force-wide and is required of the following organizations (which includes all major commands):

1. Air Force Materiel Command (formerly the Air Force Systems and Logistics Commands)
2. Armstrong Laboratory
3. Phillips Laboratory
4. Rome Laboratory
5. Wright Laboratory
6. Ogden Air Logistics Center
7. Oklahoma City Air Logistics Center
8. Sacramento Air Logistics Center
9. San Antonio Air Logistics Center
10. Warner Robins Air Logistics Center
11. Air Force Flight Test Center
12. Arnold Engineering Development Test Center
13. Civil Engineering Support Activity

14. Air Force Space Command
15. Air Training Command
16. Air University
17. Air Combat Command
18. Air Mobility Command
19. Air Force Communications Agency
20. Air Force Technical Applications Center
21. Air Force Operational Test and Evaluation Center
22. Air Force Academy
23. Air Force Studies and Analysis Agency

5.4. IMPLEMENTING ORGANIZATION RESPONSIBILITIES

Each commander/director of the organizations listed in para. 5.3 has specific responsibilities under AFR 83-1. Basically, these responsibilities are to appoint a local STINFO Manager, keep HQ SAF/AQT appraised of who holds this position, and provide the STINFO Manager the support necessary to carry out the job. The specific responsibilities are to:

1. Appoint a full-time local STINFO Manager, who reports directly to the commander/director and has the appropriate grade and delegated authority to enforce participation, including identification and appointment of points of contact within the organization who are required to carry out portions of the program.
2. Delegate to the local STINFO Manager the responsibility to appoint local STINFO Managers at subordinate activities - particularly at separate geographic locations - that require them, determining if the position must be full- or part-time.
3. Provide adequate personnel, operational, and administrative support including programming, funding, accounting, and reporting for those services maintained by their STINFO office.
4. Notify HQ SAF/AQT of the name of the local STINFO Manager and of any changes as they occur.
5. Report local implementation of the STINFO program up the chain of command to HQ SAF/AQT.

Let's now look at the Army STINFO program and the responsibilities of the higher command levels.

6. ARMY STINFO PROGRAM

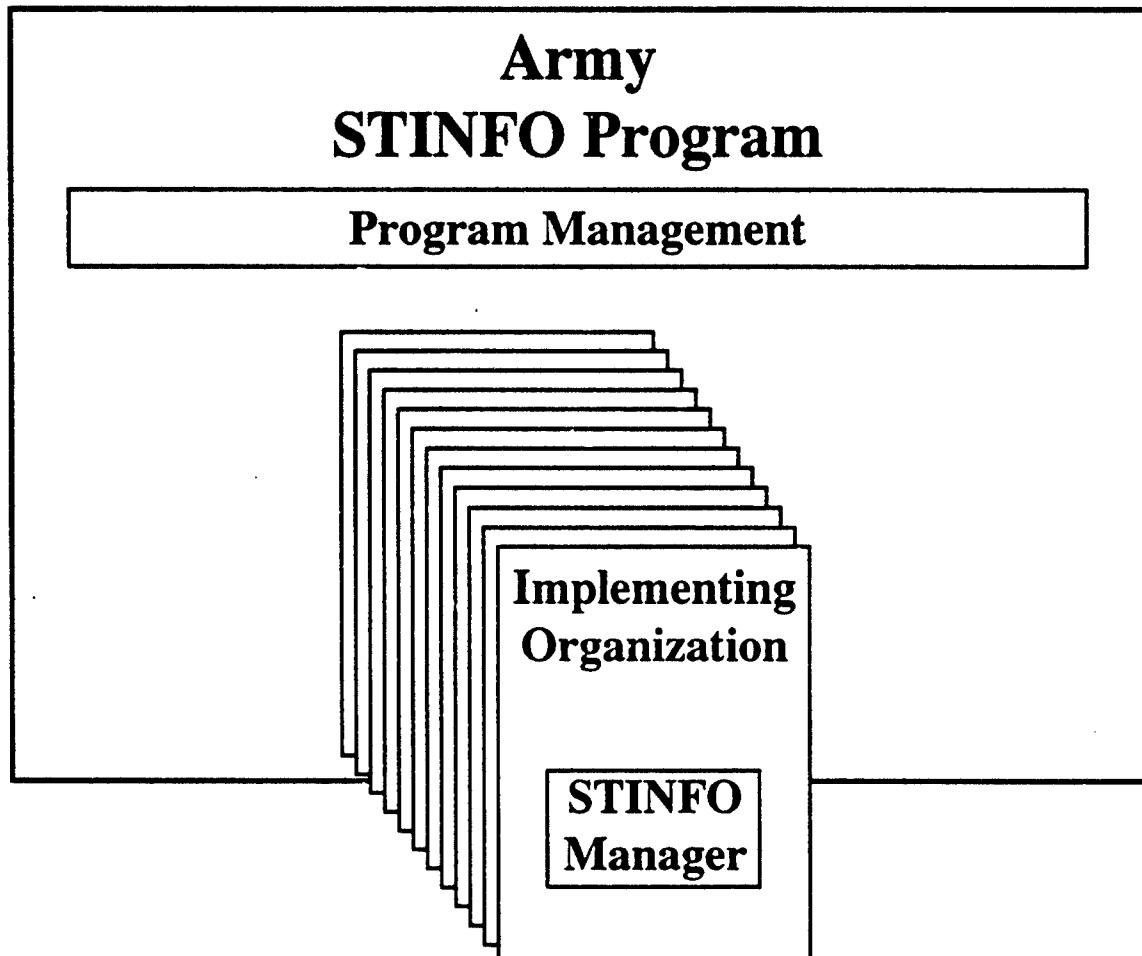


Figure 4 - Army STINFO Program

The Army STINFO program is an integral part of the DoD STIP, implementing DoD Directive 3200.12. AR 70-45, *Research, Development, and Acquisition Scientific and Technical Information Program*, governs the Army STINFO program and describes the program and its policies, objectives, applicability, responsibilities, and procedures at all levels of the program. The regulation consists of:

1. A description of the Army STINFO program.
2. A list of the program policies and objectives.
3. The applicability of the regulation and a list of exclusions.
4. The responsibilities for each component in the chain of command from the Assistant Secretary of the Army (Research, Development, and Acquisition) to the local STINFO Manager.
5. Lists the policies and procedures for the major elements of the Army STINFO program including:

- Work unit information summaries.
- Technical reports.
- Publication and reprints of articles in technical journals.
- Dissemination of scientific and technical information.
- Distribution statements.
- Centers for Analysis of Scientific and Technical Information (IACs).
- Sponsoring or cosponsoring and conducting classified and unclassified meetings.

6. Identifies the policies and procedures for Army support and use of the Defense Technical Information Center (DTIC).

The regulation states that a checklist for conducting an internal control review will be developed and published later.

AR 70-45 is currently under revision. Unlike the ten regulations that support the AF STINFO program, the Army intends to have AR 70-45 cover the entire program and include all pertinent policies and procedures. It will replace seven current regulations. A copy of the regulation is found in the STINFO Documentation binder of your training material.

6.1 POLICIES AND OBJECTIVES

The following discussion of the Army STINFO program in Section 6.1 through 6.3 uses actual language taken from AR 70-45.

The overall **objective** of the Army STINFO program is to ensure that all STI generated under Army RDT&E programs makes the maximum impact on DoD and national R&D efforts. To carry out this objective, the program provides for the interchange of scientific and technical information within and among DA components and their current and potential contractors, federal agencies and their current and future contractors, and the national and international university, not-for-profit and non-profit institutions, professional societies, business, industry, and the scientific community.

It is Army policy to establish a coordinated and comprehensive STINFO program that will:

1. Promote the advancement of science and technology.
2. Facilitate the conduct and management of research, engineering, study, and management support programs.
3. Control unwanted duplication of research, development, studies, and analyses.
4. Provide for the interchange of STINFO.
5. Promptly document all completed RDT&E efforts and make them available to approved recipients through DTIC. Uncompleted RDT&E efforts may be documented and made available through DTIC in order to enhance the dissemination of information prior to the publishing of a final report.

The objectives of the STINFO program are to increase the effectiveness of:

1. Scientific and engineering documentation.
2. Identification, evaluation, and adoption of better ways of processing, communicating, and transferring technical information.
3. The exchange of RDT&E and management data among managers, scientists, and engineers.

6.2 APPLICABILITY

It is important to remember that the regulation (and the Army STINFO program) does not cover:

1. **Top Secret** documents or material.
2. Cryptographic and communications security.
3. Communications and electronic intelligence and other categories of a similar nature that may be designated by the Defense Intelligence Agency.
4. Administrative papers, memoranda and reports, and contract or grant proposals.
5. Information furnished to the United States by foreign governments when the release of such information is forbidden by the foreign government.
6. Registered documents or publications.

6.3 PARTICIPATION REQUIREMENT

Participation in the Army STINFO program is Army-wide and is required of all organizations that: a) direct, administer, perform, and support research, development, manufacturing, test, and evaluation programs or b) originate, collect, store, issue, and lend documented resources of scientific and technical information. The regulation does not contain a list of specific organizations that must participate.

6.4 ARMY STINFO MANAGER RESPONSIBILITIES

The Directorate Executive, Advanced Concepts and Plans Directorate, Army Research Laboratory (ARL), designates the Army STINFO Manager, who is located at ARL. This person is responsible for developing policies and procedures and for providing guidance for all aspects of the STINFO program, including management of the Army's participation in the Work Unit Information System (WUIS). The Army has a designated WUIS Program Manager while the other services do not. AR 70-45 does not contain a list that assigns specific responsibilities to the Army STINFO Manager.

6.5 IMPLEMENTING ORGANIZATION RESPONSIBILITIES

Commanders and directors of laboratories, centers, and studies and analysis activities appoint local STINFO Managers and WUIS focal points at separate geographic locations. The local STINFO Manager has delegated authority to enforce compliance with the program. The STINFO Manager may be the librarian. The WUIS focal point and STINFO Manager may be the same person. AR 70-45 does not contain a list that assigns specific responsibilities to the implementing organization.

Let's now look at the local STINFO Manager responsibilities and duties.

DoD STINFO Manager Training Course

7. STINFO MANAGER RESPONSIBILITIES AND DUTIES

KEY POINTS

- Air Force and Army STINFO Manager responsibilities and duties are listed in AFR 83-1 and supporting regulations and AR 70-45 respectively. The current draft of SECNAVINST 3900.43 lists three responsibilities of the STIP Focal Point.
- STINFO Manager duties are wide-ranging and can be divided into:
 - Management duties concerning the STINFO program and office.
 - Duties that are outwardly-directed and relate mainly to information leaving an organization.
 - Duties that relate to potentially withholding information.
 - Duties that are inwardly-directed and relate to information support for the organization.
 - Educational duties.
 - Liaison and coordination duties that relate to establishing and maintaining working relationships with other STI programs and organizations.
- The STINFO Manager should be the “primary point of contact” for all STI activities at the organization and serve as the Office of Primary Responsibility (OPR) for some functions. This does not mean that the STINFO Manager does everything. For example, STI generators are responsible for producing publications that meet quality standards and for assigning the proper markings. The STINFO Manager is responsible for providing guidance, reviewing, making sure things happen, and knowing all the information key players at the organization.

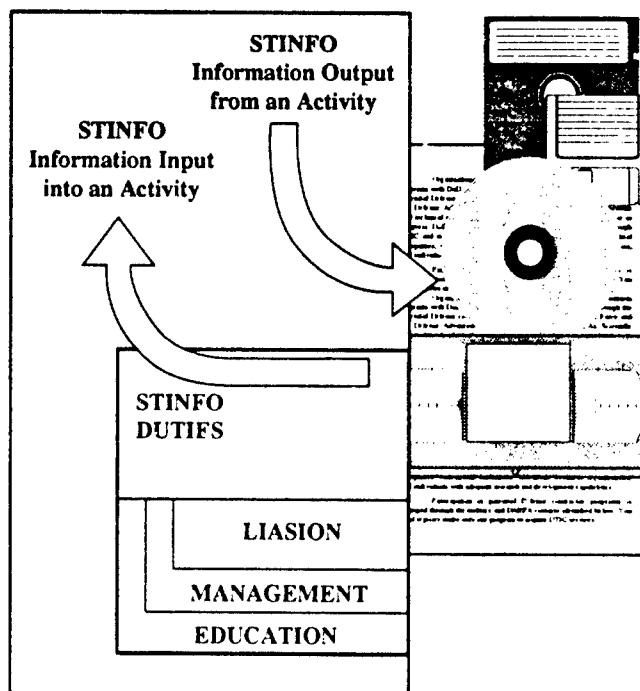


Figure 5 - STINFO Manager Duties

The following discussion of responsibilities and duties assigned to the local STINFO Manager is based on a review of DoD Directive 3200.12 and the appropriate chapters in AFR 83-1, AR 70-45; and SECNAVINST 3900.43. AFR 83-1 lists 15 duties while AR 70-45 lists 13. In addition, a review was made of regulations that support AFR 83-1, in particular AFR 83-2, *United States Air Force Technical Publications Program*, and AFR 83-3, *Marking Technical Documents*.

The major responsibilities can be grouped into 11 areas. The first three are:

1. General Management.
2. User Support.
3. Liaison and Coordination.

The other eight responsibilities reflect the principal elements of the DoD Scientific and Technical Information Program (STIP):

4. Work Unit Information System (WUIS).
5. Technical Documents
6. Publication and Reprints of Articles in Technical Journals.
7. Marking Scientific and Technical Information.
8. Dissemination of Scientific and Technical Information.
9. Centers for Analysis of Scientific and Technical Information (known as Information Analysis Centers or IACs).
10. Sponsoring or Cosponsoring and Conducting Technical Meetings.
11. Defense Technical Information Center (DTIC).

There are three other elements of the DoD STIP that are not considered part of the Air Force and Army STINFO programs:

1. Domestic Technology Transfer.
2. Information for Industry.
3. Independent Research and Development (IR&D).

They are considered separate programs by both services, but the STINFO program provides information support to them. The Navy considers these three elements as part of its STIP program. The STINFO Manager interacts with and supports these programs, and they will be discussed in Chapters 15 and 16. Figure 6 is another way to look at the principal elements of the DoD STIP.

- Literature Searches
- Work Unit Information Summaries
- Technical Reports
- Scientific Journals
- Marking Technical Documents
- Dissemination
- Conferences and Symposia
- Information Analysis Centers
- Defense Technical Information Center
- Independent Research and Development
- Domestic Technology Transfer
- Information for Industry

Air Force
and
Army
STINFO

Figure 6 - Elements of DoD STIP

Let's look at the eleven responsibilities and the duties associated with each one. These duties are considered essential to the success of a STINFO program. They should be performed or supported by the local STINFO office, whether in the Air Force, Army, Navy, or the Defense Agencies. We will be looking at them in depth in the succeeding chapters.

7.1 GENERAL MANAGEMENT

Your STINFO job is a management position; therefore, you will be doing things that managers do, such as planning, organizing, measuring, and controlling. There are five specific duties:

1. **Oversee the program and ensure that all aspects are carried out.** You are not responsible for performing all STI-related duties at the organization. An inventory of your organization's STI activities and resources and a system to track all technical publications produced will help you carry out this duty.
2. **Issue local written guidance on STINFO-related activities.** This includes local regulations, policies, procedures, etc. For example, the Air Force requires a local supplement to AFR 83-1. This guidance will help you oversee the program.
3. **Explore methods for improving STINFO systems and procedures on an ongoing basis.** Your goal is to review and seek to improve the program. The STINFO Program Manager should be informed of improvements so that others may benefit.
4. **Provide training and promotion of your program to STI users and producers at your organization.** This includes a standard STINFO presentation, a briefing to new personnel, a "Command Briefing", a STINFO handbook, and a newsletter.

5. **Report on program participation.** You will need to collect, analyze, interpret, and submit data on the effectiveness of your program. For example, AR 70-45 recommends that an annual written report on local significant STINFO activities be submitted to the Army STINFO Manager.

7.2 USER SUPPORT

Most of the STINFO Manager's duties revolve around controlling and disseminating information that flows out of the organization. However, the manager is also concerned with obtaining and providing information support services for the organization. It is your job to determine if the information needs of the user community are being met, and if they are not, to do whatever is necessary to see that these needs are met.

The single most important outside user support service is DTIC. The major source of information in your organization is the technical library. We will be discussing these two support services in Chapters 12 and 16.

7.3 LIAISON AND COORDINATION

In the day-to-day operation of the STINFO program, the manager must interact with many offices, programs, groups, and individuals. This contact varies from having just an awareness of a program or office, to maintaining a liaison relationship, and finally to having an active support or coordination relationship. For example, two offices that you will coordinate with are:

- **Data Management Office** - This office advises and assists on the completion of the Contract Data Requirements List (CDRL) and monitors the technical data deliverables.
- **Public Affairs Office** - This office approves documents for public release.

We will be discussing these two offices in Chapter 16. Figure 7 identifies some of the offices and programs.

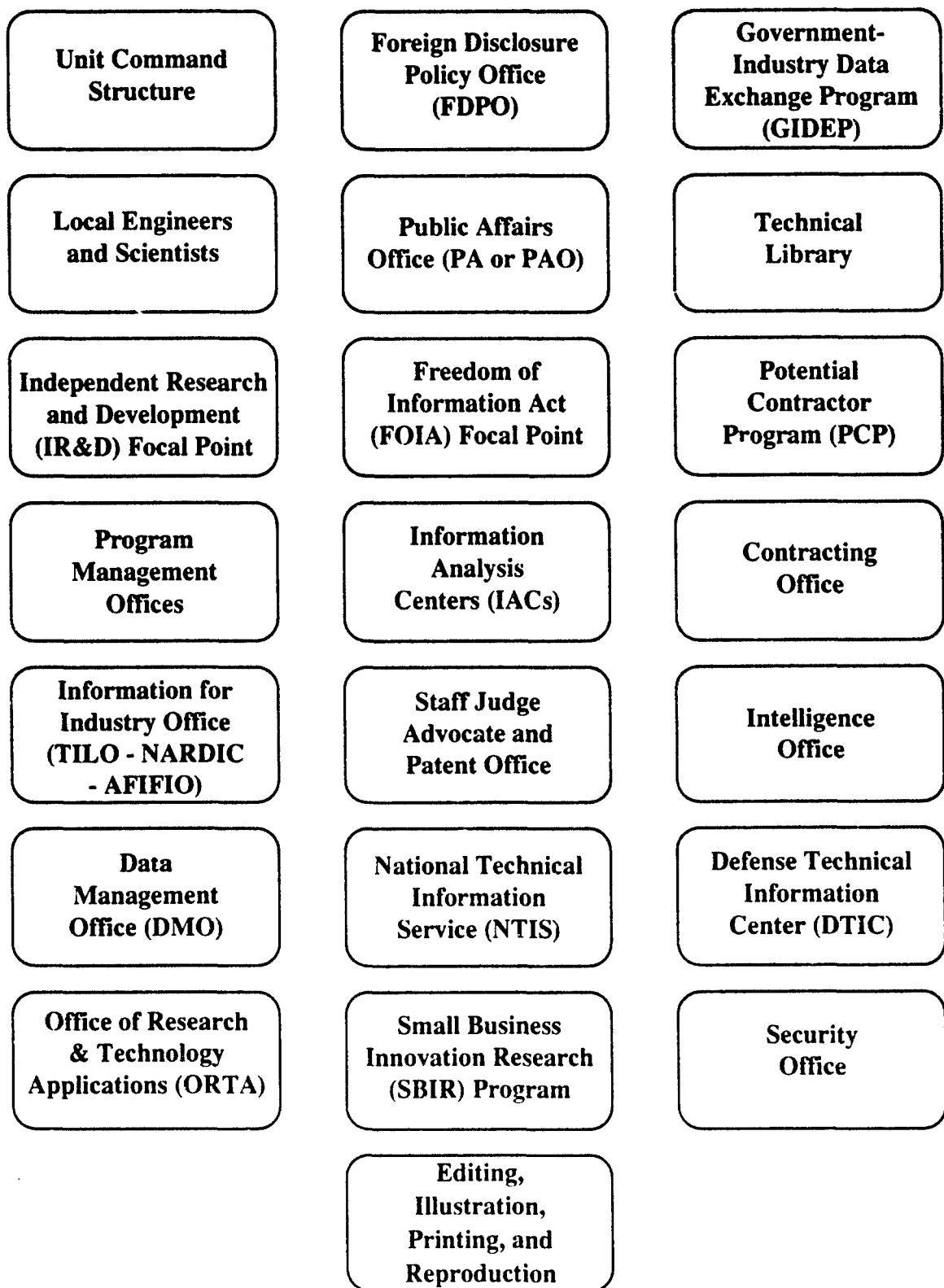


Figure 7 - Some of the Offices and Programs the STINFO Office Works with.

7.4 WORK UNIT INFORMATION SYSTEM (WUIS)

In regard to the WUIS, the STINFO Manager will ensure that:

1. A WUIS focal point and alternate are appointed for the organization.
2. The WUIS focal point is given guidance and procedures to follow to carry out the job.
3. The WUIS is searched before initiating a new work effort or making significant changes to a work effort.
4. The other DTIC databases - Technical Report (TR) and Independent Research and Development (IR&D) - and appropriate commercial databases and open literature are also searched.
5. The organization's submissions to the WUIS are timely, accurate, and complete.
6. All WUIS submissions are scanned for STI publications, and once the publications are identified, they are tracked through to final distribution.

7.5 TECHNICAL DOCUMENTS

In regard to the technical documents produced in-house and under contract, the STINFO Manager will ensure that:

1. A technical publications program is established.
2. All work efforts are promptly documented.
3. A system is developed to track all documents produced in-house or under contract.
4. Documents meet approved quality standards, including a completed SF 298.
5. All documents are properly marked to control security, distribution, and export control.
6. Primary distribution of all documents is proper and efficient.
7. A collection of locally produced documents is set up and maintained.
8. STI reporting requirements are included in relevant contracts by means of the CDRL.

7.6 PUBLICATION AND REPRINTS OF ARTICLES IN TECHNICAL JOURNALS

In regard to publication and reprints of articles in technical journals, the STINFO Manager will ensure that:

1. Articles are considered part of the technical publications program.
2. All official and unofficial materials written for publication in professional journals meet the standards and procedures outlined in governing regulations.
3. Two copies of each article and a completed SF 298 are submitted to DTIC.
4. Each article is marked with the appropriate notices.

7.7 MARKING SCIENTIFIC AND TECHNICAL INFORMATION

In regard to the marking of scientific and technical information, the STINFO Manager will ensure that:

1. Producers of STI receive guidance so they know how to select and apply distribution statements and how to determine whether the item should be marked for export control.
2. Producers of STI mark all technical materials with appropriate markings.
3. The selected distribution marking is checked for appropriateness and the cited reason makes sense for the particular material. In addition, the distribution statement, security classification, and export control are checked for consistency.
4. Assigned distribution statements are reviewed on a regular basis.

7.8 DISSEMINATION OF SCIENTIFIC AND TECHNICAL INFORMATION

In regard to the dissemination of scientific and technical information, the STINFO Manager will ensure that:

1. Technical materials are properly marked before distribution.
2. The primary distribution of all technical documents is proper and efficient.
3. Technical documents are distributed as widely as possible, consistent with release controls.
4. Two copies of each appropriate document are submitted to DTIC.
5. DTIC handles secondary distribution for all appropriate documents produced by the organization.
6. Foreign dissemination is handled through foreign disclosure channels.
7. All documents proposed for public release are reviewed and cleared by the Public Affairs Office.

7.9 INFORMATION ANALYSIS CENTERS (IAC)

If there is an IAC at the organization, the STINFO Manager should monitor the IAC to ensure that:

1. The IAC is handling its information properly. STI generated by the IAC must meet all STINFO program requirements and procedures.
2. DTIC handles secondary distribution, if required.

7.10 SPONSORING OR COSPONSORING AND CONDUCTING TECHNICAL MEETINGS

In regard to sponsoring or cosponsoring and conducting technical meetings, the STINFO Manager will ensure that:

1. The Meeting Manager receives guidance on planning a technical meeting.
2. The Meeting Manager is familiar with the requirements and procedures for holding unclassified and classified meetings.
3. The Meeting Manager is familiar with foreign disclosure procedures when there will be foreign attendees.
4. Papers that are presented at meetings are published and submitted with completed SF 298s to DTIC.

7.11 DEFENSE TECHNICAL INFORMATION CENTER (DTIC)

In regard to DTIC, the STINFO Manager will ensure that:

1. The products and services of DTIC are supported and used.
2. A primary point of contact for DTIC is appointed.
3. Two copies of each appropriate document are submitted to DTIC.
4. DTIC handles secondary distribution for all appropriate documents produced by the organization.
5. All unclassified, unlimited documents to be sent to NTIS (and the general public) are distributed through DTIC.
6. Literature searches of the DTIC databases - WUIS, TR, and IR&D - are conducted before initiating a new work effort or making significant changes to a work effort.



Figure 8

8. WORK UNIT INFORMATION SYSTEM (WUIS)

KEY POINTS

- Participation in the Research and Technology Work Unit Information System (known as the WUIS) is required by the DoD STIP and controlled by DoD 3200.12-R-1.
- The requirement is implemented in the Air Force by AFR 80-12. There are no current Army and Navy regulations. AFR 83-1, AR 70-45, and SECNAVINST 3900.43 list STINFO duties.
- The WUIS is a reporting system that summarizes ongoing work efforts within the RDT&E community, identifying the when, where, how, and cost of research. It is an important management information tool available to personnel involved in DoD RDT&E or acquisition management planning, programming, or budgeting.
- The work unit is the smallest segment into which RDT&E efforts are divided for local administration or control.
- DTIC maintains the WUIS database, the central store of WUIS data, on the Defense RDT&E Online System (DROLS). The database is referred to as the “WUIS”.
- Literature searches of the WUIS database and the submissions of work unit summaries to the WUIS database are required by DoD 3200.12-R-1.
- DTIC works closely with WUIS contributors concerning their submissions and provides them with a quarterly statistical report.
- A work unit summary, a set of data elements that describes a work effort, is submitted to DTIC, either by computer diskette or magnetic tape. Submission is standardized, and the WUIS Worksheet may be used as a guide. DTIC no longer accepts submission of the DD Form 1498, *Research and Technology Work Unit Summary*. The WUIS, however, is frequently referred to as the 1498 database.
- The revised DoD 3200.12-M-1, *WUIS Input Manual (Draft)*, contains uniform procedures, fields, codes, and formats for reporting work effort information.
- Contracted Advisory and Assistance Services (CAAS), particularly studies and analyses, are reported to the WUIS. This is required by DoD Directive 4205.2, *Acquiring and Managing Contracted Advisory and Assistance Services (CAAS)*, and service regulations.
- The Army WUIS Program Manager is Ms. Helen Sperling, (301) 394-2687/3324 or DSN 290-2687. There is no equivalent position in the other military services.
- The WUIS database was redesigned in FY92, and as a result the regulations will be revised.

The following discussion is an overview of the WUIS, its requirements, and the STINFO Manager responsibilities. Copies of some of the cited regulations are found in the STINFO Documentation binder of your training material.

8.1 THE PURPOSE, GOAL, AND OBJECTIVES OF THE WUIS

The purpose, goal, and objectives of the WUIS are defined in DoD 3200.12-R-1. The following summary has been taken from the regulation.

The purpose of the WUIS is to provide a comprehensive database containing summary descriptions of the technical content, performers, monitors, and funding sources of DoD research or technological efforts. The goal is to increase the effectiveness of the DoD RDT&E (and acquisition management) program by making this database available to all DoD scientists, engineers, and managers, as well as the DoD contractor base in industry and academia.

The specific objectives, as listed in the regulation, are:

1. Help R&D managers identify DoD R&T efforts in a broad range of scientific disciplines and technologies.
2. Permit managers easily to coordinate programs with other DoD Components and with other agencies and branches of the Federal Government to eliminate overlap of effort.
3. Help individual scientists and engineers determine current and past efforts related to their own work.
4. Enable scientists, engineers, and managers to identify individuals working in technical areas of interest who can be contacted for further technical information.
5. Allow scientists and engineers to maintain current awareness through periodic reviews of pertinent work units.
6. Enhance the efficiency and cost effectiveness of the defense contractor community by providing knowledge of ongoing DoD work so their R&D efforts can be focused toward national defense and military requirements.

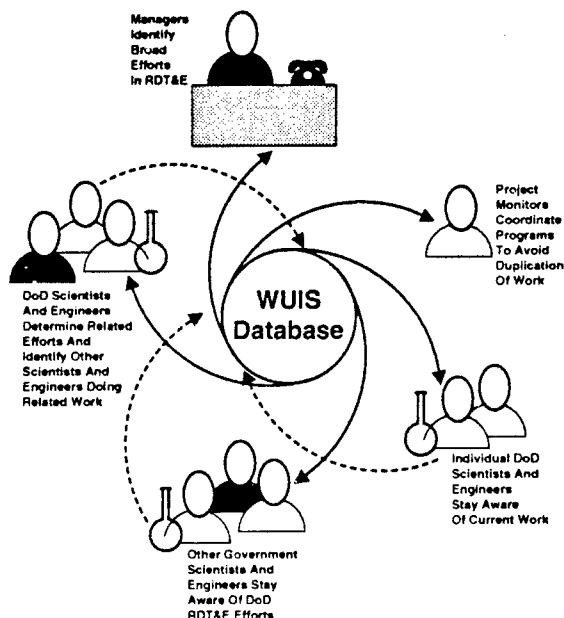


Figure 9 - How the WUIS Database Increases Effectiveness of DoD RDT&E

8.2 DOD RDT&E PROGRAM

Because the work unit is the basis of the WUIS, let's take a brief look at the RDT&E program structure. The DoD budget is divided into 11 classifications of Congressional appropriations. Program 6 is RDT&E and is divided into six categories. These categories, listed in Figure 10, are frequently referenced by the numerical shorthand 6.1 through "6.6". 6.1 and 6.2 categories comprise the Technology Base portion of RDT&E.

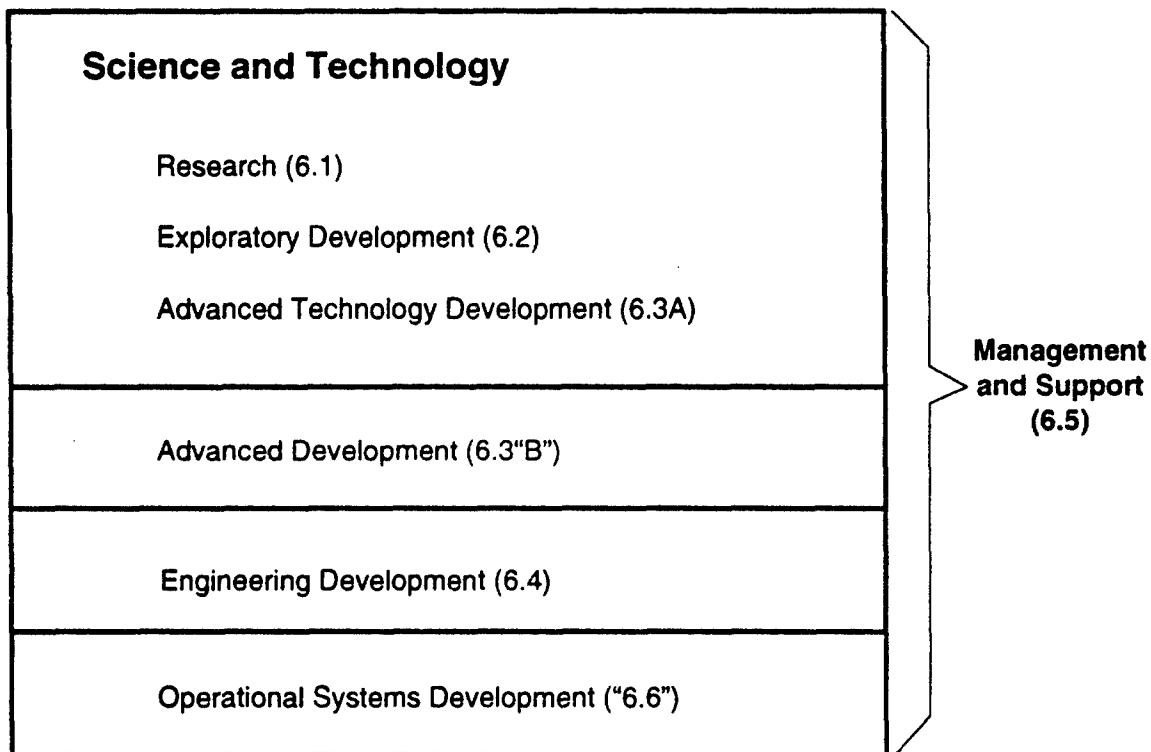


Figure 10 - RDT&E by Budget Categories

These six categories contain a large number of program elements. For example, the number of program elements in the DoD Science and Technology program was 160 in FY91 and 153 in FY92. Each program element is broken down into a number of units, sub-units, etc., usually ranging from projects to tasks, and representing a cohesive technology area containing many related activities. Some program elements support generic technologies, but most are focused on developing improved military capability and thus encompass a number of technology areas. Funds for basic research are allocated by discipline. Program elements are the basic building blocks for the Future Years Defense Program (FYPD). FYPD was formerly called the Five Year Defense Program.

Let's look at some other definitions:

Project - A project is a subdivision of a program element, designating a DoD research effort or group of closely related efforts. It is a planned undertaking, having a definite beginning and end, and involving definition, development, production, and logistics support. The definition of what constitutes a project varies among the different military services. A project number is assigned. A project may be divided into two or more tasks.

Task - A project may be divided into small segments called tasks for purposes of local administration. Tasks encompass exploratory development efforts directed toward a specific objective. They consist of one or more work units and may be assigned to one or more individual laboratories for implementation. Task numbers are assigned.

Work Unit - A work unit is the smallest segment into which RDT&E efforts are normally divided for local administration or control. Each work unit has a specific objective, finite duration, and results in an end product. It is technically distinct in scope, objective, and duration from other research or technology efforts with which it may be aggregated for either financial, administrative, or contracting purposes. The term might also be described as a problem assignment, sub-task, work item, job order, or any other term used at the local level to describe scientific, technical, or engineering efforts for management purposes.

Figure 11 shows the relationship between program element, project, task, and work unit.

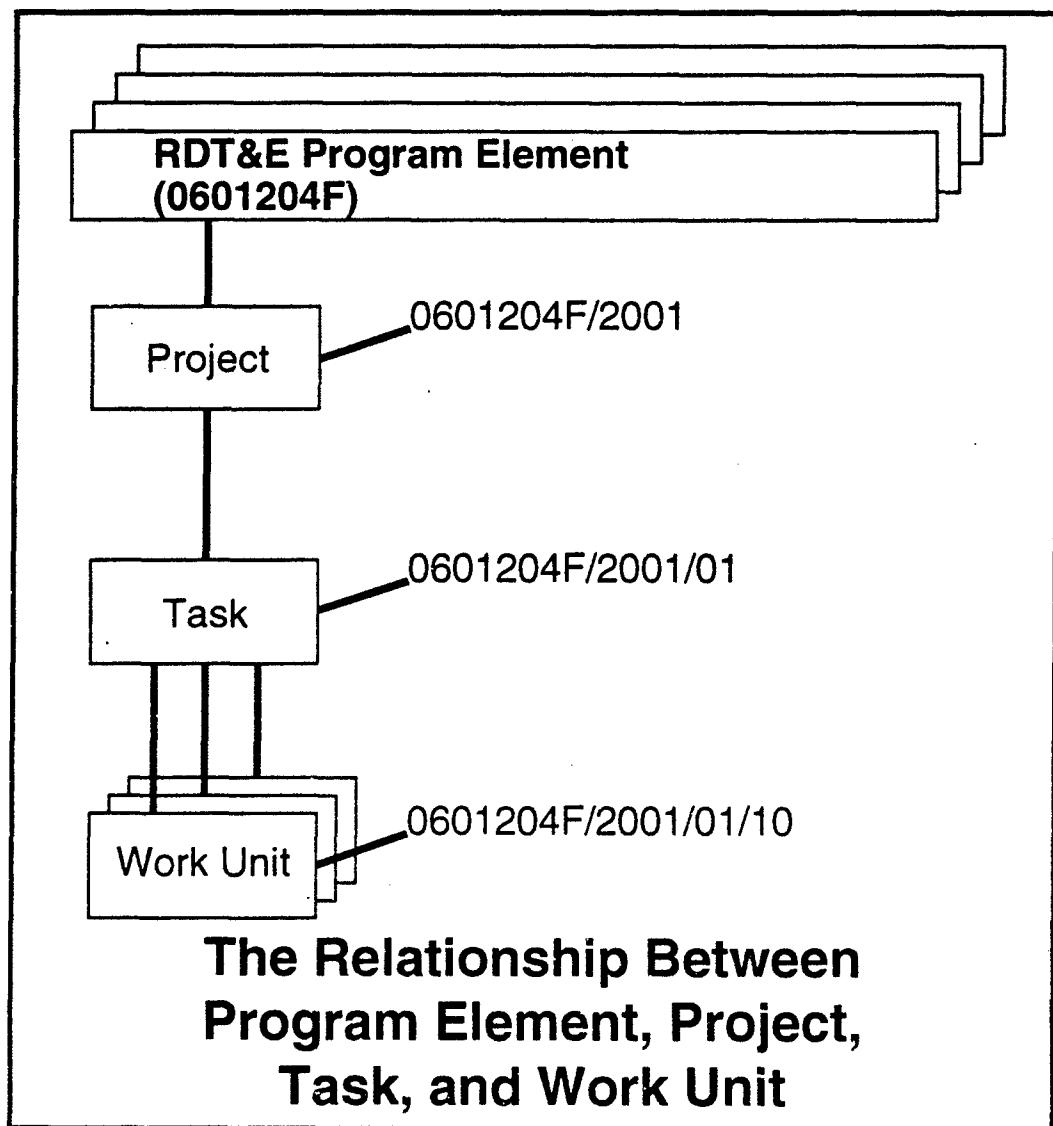


Figure 11 - Relationship between program element, project, task, and work unit

8.3 WHAT TO REPORT

Some confusion exists over what should be reported in the WUIS database. The source of this confusion stems from the name "work unit" being associated with the system. In addition, the wording in the DoD WUIS regulation concerning what should be reported adds to the confusion. R&D organizations perform their work at the work unit level. For these organizations, clearly each work unit corresponds to an entry in the WUIS database. However, many organizations performing studies and other technological efforts have not participated in the system because they were not primarily performing RDT&E at the work unit level. The phrase "work effort" is a better description of the type of information that should be reported in the WUIS database. The redesign of the database and revision of the accompanying regulations will make coverage clearer.

DoD 3200.12-R-1 states that Data on all DoD-Performed or -Sponsored Work that Contributes to Research and Technology Shall be Summarized and Reported to the R&T WUIS Database.

A work unit summary should be reported for each R&D effort, study effort, and technological and engineering effort regardless of:

1. Program category of funding.
2. Whether the work was performed in-house or under contract or grant.
3. Whether work was performed by a non-DoD agency through an inter-agency transfer of funds.

This includes all efforts, whether they contribute positive or negative results to the technology base. The size of the effort reported to the WUIS database is determined by technical considerations and not by funding or personnel requirements.

According to the DoD regulation, the three basic types of work unit summaries are:

1. **DoD In-House Work** - The description of each technically distinguishable effort performed by or in a DoD RDT&E activity. The size of the work unit shall be determined by technical considerations, not on funding level or personnel requirements. Normally, a work unit should not exceed five professional man-years per year or the equivalent.
2. **Contractual Work** - The description of each uniquely-numbered contract or grant awarded for the performance of a research or technology effort. To identify technically distinguishable efforts, some large contracts or grants may need to be subdivided into several work units.
3. **Non-DoD In-House Work** - A description of each research or technology effort performed by a non-DoD government agency through an interagency transfer of funds.

Work unit summaries are mandatory for certain categories of efforts. Figure 12 summarizes the requirements.

Performing Agency	WUIS Record Required?				
	Funding Category		Research and Technology	Study and Analysis	Sponsored by DUSDR&AT
	6.1, 6.2, 6.3A	All Others			
DoD Activity	Required	Varies, depends on work performed	Required	Required	Required
Contractor	Required	Varies, depends on work performed	Required	Required	Required
Academic Institution	Required	Required	Required	Required	Required
Non-DoD Government Agency	Required	Required	Required	Required	Required

Figure 12 - Summary of Work Requiring WUIS Records

To determine if your organization's work must be reported in the WUIS database, the following questions should be answered. A positive response to any of these questions means that the work must be reported:

1. **Is the Effort Research or Technology?**¹ A record is required, regardless of program, program category, or appropriation. Dollar values or performing agencies are not reasons for exclusion.
2. **Is the Work Funded Wholly or in Part from Program Categories 6.1, 6.2, or 6.3A?** Again, dollar values or performing agencies are not reasons for exclusion.
3. **Is the Work Under the Control of the Deputy Director for Defense Research and Engineering (Research and Advanced Technology) (DDDR&E(R&AT))?**
4. **Is the Work Funded from RDT&E Money and Performed by a U.S. Academic Institution?** WUIS records are required for all work, including services, supplies, and equipment.
5. **Is the Work a Contracted Advisory and Assistance Service (CAAS), particularly a study or analysis?**

There are other categories of efforts that are not so obvious but should be reported in the WUIS database. For example, summaries should be submitted for Small Business Innovation Research (SBIR) program awards and Cooperative Research and Development Agreements (CRDAs).

¹ Research is defined as all efforts directed toward increased knowledge of natural phenomena and environment and efforts directed toward solving long-term defense problems in the physical, engineering, life, behavioral, and social sciences. Technology is defined as scientific or engineering efforts directed toward eliminating technical barriers and providing solutions to technical problems (excluding routine engineering) encountered in RDT&E programs.

8.4 WHAT NOT TO REPORT

There are certain efforts that do not require a work unit summary. Overall, contracts for services, supplies, and equipment used in support of RDT&E efforts are not reported in the WUIS database. The only exception to this is the required reporting of all contracted work by academic institutions.

The Air Force and Army have similar exception lists in AFR 83-1 and AR 70-45. The general exceptions (with annotations) are:

1. Supplies or equipment used (and not the result of) in R&D work.
2. Routine data collection.
3. Data analysis.
4. Equipment installation (AFR 83-1 lists equipment analysis).
5. Programming or computational support (Other support services include library and translation services. However, the use of such support services in the conduct of research shall not be the basis for not reporting the effort.).
6. Maintenance and support services.
7. Routine engineering.
8. Conferences and symposia.
9. Developmental, operational, and surveillance testing.
10. Training.
11. Efforts involving strategic intelligence data analysis, wherein the sharing of such information could compromise the national defense (on the Army list only).

8.5 WHEN TO REPORT

In all cases, a work unit summary must be prepared and submitted to DTIC within 30 days after the local action it reflects has occurred within the reporting organization. It is important to remember that local actions include the initiation of a new work effort, any significant changes to it, the completion of the effort, or the termination of the effort.

According to the DoD regulation, local actions are:

1. **DoD In-House Work** - The acceptance or approval to initiate a new RDT&E effort. A change to, completion of, or termination of such an effort.
2. **Contractual Work** - The award of a contract or grant. A change to a contract or grant that affects the description of the work, level of funding, identity of a principal investigator, or duration of the effort. Completion or termination of a contract or grant.
3. **Non-DoD In-House Work** - The transfer of funds to a non-DoD government agency and changes to, completion of, or termination of any effort so funded.

In addition, each record must be reviewed, revised, and changes or corrections submitted at least once a year. The purpose of this review is to keep the database current in terms of progress, current fiscal year funding, and use of personnel. Updating of CAAS records is subject to DoD Directive 4205.2 and service requirements.

8.6 HOW TO REPORT

A work unit summary is used to report work efforts to the WUIS database. The data is submitted to DTIC in the machine-readable formats of computer diskette or magnetic tape. The WUIS Worksheet may be used as a guide. DTIC no longer accepts submission of the DD Form 1498, *Research and Technology Work Unit Summary*. The revised DoD 3200.12-M-1, *WUIS Input Manual (Draft)*, contains the required instructions on completing a work unit summary.

There are a number of software packages available for WUIS input. The following are the current three packages. The requirements of DoD 3200.12-M-1 are met by using one of these packages.

PC-WUIS is DTIC's PC-based system for inputting data to the WUIS database. The application is an easily used software package, using features of dBASE IV, that allows you to create records and submit your data to DTIC on floppy diskettes. PC-WUIS has numerous capabilities, e.g., record validation, file protection, and file management. It is an efficient and simple method for satisfying the DoD regulation requirements for inputting data to the WUIS database. PC-WUIS is available free-of-charge to organizations that input work unit summaries to DTIC. For information, contact DTIC's Programs Management Branch; (703) 274-4408 or DSN 284-4408.

DAWSON I. DAWSON I, developed by Phillips Laboratory, is another software package. DAWSON I is an ORACLE/FORTRAN set of programs for the VAX computer. DAWSON is available free-of-charge to organizations who input work unit summaries to DTIC. For information, contact Ms. Elaine Dawson at Kirtland AFB, NM; (505) 846-5776 or DSN 246-5776.

WInS. The Army Materiel Command Has Implemented Its Own PC-Based Input System, *Work Unit Information Summary Input System (WInS)*, for use Army-wide. WInS is user-friendly, and uses the features of dBASE IV. It is contractor-supported by BRTRC Technology Research Corporation.

In addition, BRTRC performs the following WUIS duties for the Army:

1. Operating a telephone technical support and trouble shooting hotline for WInS users.
2. Training potential WInS users.
3. Processing work unit summaries into the WInS for organizations that have very few work unit summaries or do not have the capability of inputting directly into the system.
4. Generating master transaction tapes from WUIS for delivery to DTIC.

Approximately 105 Army organizations use WInS. Presently, most of them are sending diskettes directly to BRTRC for submission by batch tape to DTIC. More than sixty organizations input directly into WInS; forty organizations (small-volume users) send hard copy to BRTRC for input into WInS; and two organizations with a large volume of work unit summaries submit batch tapes directly to DTIC. Army Research Office (ARO) and the Medical R&D Command (MRDC) are currently using batch input. Inquiries regarding input into the WInS should be directed to the WInS support staff; (703) 255-5438/5439.

8.7 LITERATURE SEARCHES

DoD 3200.12-R-1 requires that a comprehensive search of the WUIS database be performed by program managers and project officers during the planning stages of any new R&T or study effort. The purpose of this search is to identify related work and to ensure that work being done by other DoD Components will not be duplicated. Failure to determine that the proposed research is unnecessary duplication, or failure to build on related work can result in wasted manpower and fiscal resources. It is necessary, therefore, to increase awareness and emphasis of the role of the WUIS database. This includes ensuring that searches are performed, and all pertinent data are submitted to the database in a timely fashion. It is vital that the WUIS be as complete and accurate as possible, to enable it to function as a mechanism to prevent waste and unnecessary duplication of effort.

The required literature search of the WUIS database has been expanded to include the other DTIC databases - Technical Report (TR) and Independent Research and Development (IR&D) - and appropriate commercial databases and open literature. Both AFR 83-1 and AR 70-45 state the requirement. SECNAVINST 3900.43 requires a review of DTIC databases only.

For studies and analyses, Defense Federal Acquisition Supplement (DFARS) 237.206 states that the purchase request package must contain a signed statement that: a) DTIC and other information sources have been queried; b) evidence of those queries are on file; and c) no existing scientific or technical report could fulfill the requirement.

The Air Force and Army require that a literature search be conducted within a specific time period. AFR 83-1 requires that a search be performed no more than six months before beginning a new effort or making significant changes to an effort. AR 70-45 requires that a literature search be performed within one year of starting a new effort or making significant changes to an effort.

AR 70-45 includes a list that states when searches will be performed:

1. Initiating any in-house effort.
2. Arranging for work to be performed by other government agencies.
3. Requesting contractual services.
4. Making significant changes to on-going efforts.
5. Submitting topics for the SBIR solicitation.
6. Confirming the unique and innovative nature of unsolicited proposals.

This list can apply to all DoD components.

Both the Air Force and Army regulations include literature search exception lists. They are similar to the exception list for work unit summaries that is found in Section 8.4 of this chapter.

The literature search and its analysis should be retained for at least the life of the project. Search control numbers and dates should be assigned and indicated on the work unit summary. If similar work is found to exist, the reason for initiating the new effort should be included on the work unit summary.

8.8 WHO HAS ACCESS TO THE WUIS DATABASE?

The information in the WUIS database is not publicly available. Subject to the security restrictions and release limitations imposed by the submitting activities, the information in the WUIS database is releasable to all DoD scientists, engineers, and managers; DoD contractors; other government agencies and their contractors; and other qualified organizations. All users must be registered with DTIC. To the maximum extent possible, the work unit summary should be prepared to permit access to and use by the DoD contractor community. For example, AR 70-45 states that Distribution Statements C and D will be used to the maximum extent possible, and every attempt will be made to keep the information contained in a record unclassified. The WUIS database contains less than 4% classified records.

8.9 THE FUTURE OF THE WUIS

In FY 92 a revision of the WUIS database was undertaken to provide both input and retrieval sites with a more responsive system, designed to meet their requirements. The specifications for this revision were formulated through consultation and consensus among WUIS users, including each military service STINFO Program Manager, the defense agencies, and the retrieval community. It is anticipated that one result of this cooperative effort will be increased ease in compiling data and submitting it to the WUIS. The database will be an improved retrieval system that will allow more meaningful retrieval of the information needed by all levels of the DoD RDT&E and acquisition management communities. The redesign is complete.

8.10 NAVY CD-ROM PROJECT

In FY90 the Department of the Navy (ONT-263) initiated a project to produce a CD-ROM product that contained all unclassified Navy WUIS records. The work was performed by the Naval Air Development Center at Warminster, PA (now called the Naval Air Warfare Center, Aircraft Division, Warminster). The project is completed, and the result is a CD-ROM product that contains all unclassified WUIS records (not just Navy) and all Navy patents. Eventually, all Navy patents pending and all listings of naval technology appearing in the *Navy Domestic Technology Transfer Fact Sheet* will be included.

The Naval Research Laboratory is currently running the CD-ROM product on their local area network (LAN) for use by all who have access to the LAN. The Navy has 100 copies available for beta testing and distribution is underway. The product will be current through May 1992.

The user-friendly software provides several convenient, time-saving search options. It has proven very helpful in conducting the required literature search of the WUIS before the start of any new work efforts. KA Ware and Folio software are also available on the CD-ROM.

8.11 STINFO RESPONSIBILITIES

Since the Work Unit Information System is a major element of the DoD STIP, it is important that you understand its purpose, what is required of military activities, and the responsibilities of the STINFO Manager.

The specific WUIS responsibilities are assigned across the DoD to a variety of offices that have different responsibilities and functions. There are, however, some common scenarios. A WUIS focal point is

designated for the activity. The technical library usually performs the literature searches. Work unit reporting, i.e., preparation and submission of the work unit summary, is normally done by the DoD agency performing the work or issuing the contract or grant. In the case of a transfer of funds to a non-DoD agency that will perform the work, reporting is done by the DoD agency transferring the funds. In the case of a transfer of funds to another DoD agency, reporting is done by the recipient DoD agency.

The actual preparation of the work unit summary is done by the individual who is performing the in-house work or technically monitoring the contracted work. Some common names are project officer, responsible individual, principal investigator, or the Contracting Officer's Technical Representative (COTR). The actual inputting of the work unit summary is the responsibility of the STINFO office, as is becoming common in the Air Force, the library, or other offices, such as finance, planning, and plans and programs.

Throughout DoD, the STINFO Manager is fulfilling one or more of the WUIS responsibilities. The STINFO Manager may be the WUIS focal point or may be responsible for inputting the work unit summaries. Regardless of where the work is performed, the STINFO Manager should have the authority to enforce participation in the WUIS, to develop policies and procedures, and to monitor the organization's participation in the WUIS.

The STINFO Manager's responsibilities concerning the WUIS are:

- **Literature Searches:** Ensure that the WUIS database is searched before initiating a new work effort or making significant changes to a work effort. Ensure that the other DTIC databases - Technical Report (TR) and Independent Research and Development (IR&D) - and appropriate commercial databases and open literature are also searched.
- **Full Reporting:** Ensure that a WUIS focal point and alternate are appointed and given guidance. Ensure that the organization's submissions to the WUIS are timely, accurate, and complete. This means ensuring that all contract and in-house work efforts are reported and kept up-to-date.
- **Tracking WUIS Output:** Ensure that all new work unit summaries for the organization are scanned for STI publications, such as technical reports. Once identified, the STI publications should be tracked through to final distribution.

8.12 DOCUMENTATION

Major documents that support the WUIS include:

1. AFR 80-12, *Research and Technology Work Unit Information System*
2. AFR 83-1, *U.S. Air Force Scientific and Technical Information Program*
3. AR 5-14, *Managing Contracted Advisory and Assistance Services*
4. AR 70-45, *Research, Development, and Acquisition Scientific and Technical Information Program (Draft)*

DoD STINFO Manager Training Course

5. Blados, Walter R.; Maiorana, Charlie; Kuhn, Allan D. *The Work Unit Information System*. Washington, DC: Director for Scientific and Technical Information, Secretary of the Air Force (SAF/AQT); March, 1990.
USAF STINFO Management 90/3, SAF/AQT-SR-90-003, AD-A231 149
USAF STINFO Management 90/3-Video, SAF/AQT-Video-90-002, AD-M000 016
USAF STINFO Management 90/3-Floppy, SAF/AQT-Floppy-90-003, AD-M000 086
6. DFARS 237.206, *Advisory and Assistance Services*
7. DLAM 4185.4, *Research and Technology Work Unit Information System Users Manual*
8. DoD 3200.12-M-1, *WUIS Input Manual (Draft)*
9. DoD 3200.12-R-1, *Research and Technology Work Unit Information System Regulation*
10. DoD Directive 4205.2, *Acquiring and Managing Contracted Advisory and Assistance Services (CAAS)*
11. SECNAVINST 3900.43, *Navy Scientific and Technical Information Program (STIP) (Draft)*
12. *Work Unit Information System (WUIS) Worksheet*

9. TECHNICAL PUBLICATIONS PROGRAM - TRACKING, PROCESSING, AND DISSEMINATING

KEY POINTS

- There are four basic RDT&E publishing requirements:
 - The results of in-house and contracted efforts must be formally documented.
 - Both positive and negative results must be documented.
 - Publications must be completed and disseminated in a timely manner, usually within six months after the work is completed or terminated.
 - Publications are submitted to DTIC, which is responsible for secondary distribution.
- The STINFO Manager is responsible for establishing a technical publications program at the organization to include the functions of tracking, processing, and disseminating STI publications.
- A tracking system accounts for all in-house and contracted STI publications being produced at the organization. It should contain information about the status of publications that are projected, in-process, or completed.
- The STINFO Manager plays an active role in the processing of publications at the organization by:
 - Providing guidance to the author/contract monitor about the various forms, formats, and procedures to follow to publish.
 - Conducting a qualitative review of each publication.
 - Coordinating the various steps involved in getting a publication "out-the-door".
 - Examining and updating procedures to minimize publication processing time.
- The STINFO Manager is responsible for ensuring that all technical publications produced by the organization are properly and efficiently disseminated through primary distribution. One of the main duties is to maintain an up-to-date primary distribution list that includes DTIC, which receives two copies of each appropriate publication.
- The STINFO Manager is also responsible for:
 - Ensuring that STI reporting requirements are included in contracts by means of the DD Form 1423, *Contract Data Requirements List*.
 - Ensuring that the DD Form 250, *Material Inspection and Receiving Report*, is not signed until the required publication is determined to be acceptable.
 - Ensuring that a collection of locally produced publications is established and maintained.
- ANSI Z39.18-1987, *Scientific and Technical Reports - Organization, Preparation, and Production*, is the format standard that has replaced MIL-STD-847B. They are very similar.
- AFR 83-2, *United States Air Force Technical Publications Program*, and AR 70-45 provide the policies, responsibilities, and procedures for their respective publications programs. A copy of AFR 83-2 is found in the STINFO Documentation binder of your training material.

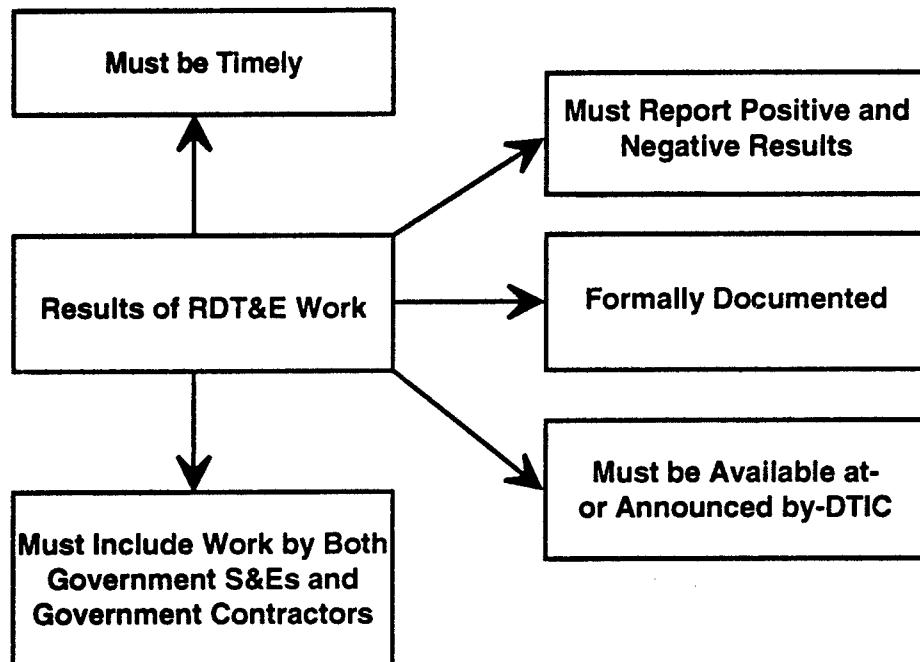


Figure 13 - Publishing Requirements for Technical Publications

Let's look at some of the elements and duties of a technical publications program. Limitation controls and markings will be discussed in Chapter 10.

9.1 TYPES OF TECHNICAL PUBLICATIONS

The results of DoD RDT&E efforts, both positive and negative, must be formally documented and published as technical publications. There are benefits to publishing results of DoD efforts, and figure 14 shows some of these benefits. DoD Directive 3200.12 states that all significant scientific or technological observations, findings, recommendations, and results derived from DoD endeavors, including those generated under contracts or grants that are pertinent to the DoD mission, contribute to the DoD, or national scientific or technological base, will be recorded as technical documents. A **technical document** is another name for a technical publication and is defined as any recorded information, regardless of its medium, physical form, or characteristics, that presents scientific and technical information or technical data. Another common term is scientific and technical document.

The term "technical publication" is defined very broadly and includes such publication types as technical report, technical memorandum, technical note, journal article, conference paper, study or analysis, and handbook. Paper has been the traditional medium of publication, but results of RDT&E efforts are now published in nonprint formats such as computer diskette, videorecording, magnetic tape, and CD-ROM.

AFR 83-2 provides definitions of some types of technical publications:

1. **Technical Report** - A document in which the organization presents a formal documentation of results. Prepare a technical report when an effort is completed or to report on a major phase of an effort.

2. **Conference Proceedings** - A compilation of presentations, lectures, or papers delivered at a meeting, symposium, conference, or convention.
3. **Special Report** - A document directed toward a specific user.
4. **Technical Paper** - An alternate form of technical report. The format of the presentation is determined by the publisher or the intended use of the document. Journal articles are technical papers.
5. **Technical Memorandum, Technical Note, Progress Report, Interim Report** - Publications that record interim or partial results of an effort to document Air Force needs, operational requirements, and science and technology objectives. These reports are highly useful as products of very complex efforts, or for efforts that terminate before completion for which there is no final report.

Two common types of publications are the **Technical Report (TR)** and the **Journal Article**.

The **Technical Report** has traditionally been used to document DoD RDT&E efforts. It is designed to convey the results of basic or applied research and exhibits a number of unique characteristics, such as a limited readership, distribution that may be limited or restricted, and contents that may include classified or proprietary information. Technical reports are normally final reports and document empirical findings, resolve an R&D issue, or summarize the state-of-the-art of a technology, etc. The technical report is the method of publication when the research results reported are of special significance to DoD, other government agencies, or contractors.

A **Technical Report** has many advantages as a reporting tool. Some advantages are:

1. There are no limitations on length of report or depth of detail.
2. Report can be distributed directly to those needing the information.
3. The report can be reproduced without worry of copyright infringement.
4. Lengthy delays in publication time can be avoided in certain situations.

The **Journal Article** in a well known technical journal is the accepted standard of professional recognition. DoD encourages its scientific and technical personnel to publish research results in recognized journals, and the article may be used to satisfy the requirements for formal documentation, particularly if the work reported was funded by 6.1 or 6.2 money. Journal articles may not include any limited, classified, or export-controlled information. If the publishing of a journal article requires the omitting of important information that is limited, classified, or export-controlled, a technical report should also be published. There are also classified journals. Authors select the journal and comply with the journal's publication procedures and schedules. Refereed journals are preferred.

Some advantages of journal publishing are:

1. Inclusion in a refereed journal brings professional prestige.
2. Dissemination is to a wider, and more diversified audience than with the technical report.

Some disadvantages of journal publishing relative to the technical report are:

1. Journals are copyrighted.
2. There is a publication time lag for most journals.
3. There are limitations on length of the journal article.

Both AFR 83-2 and AR 70-45 contain chapters about publishing and reprinting articles in technical journals. Air Force and Army STINFO Managers should become familiar with these chapters because policies and procedures concerning journal publishing are much different from policies concerning other technical publications.

For example, AFR 83-2 and AR 70-45 distinguish between "official" and "unofficial" journal articles. Official material can be defined as articles in which the U.S. Government has a proprietary interest and that were prepared at the direction of the author's supervisor or as part of the author's official duties. Unofficial material can be defined as manuscripts prepared by U.S. Government personnel as private individuals on off-duty time and in which the U.S. Government has no proprietary interest. Such articles are unofficial even if the authors were permitted and encouraged by official supervisors to write them, and the articles concern work done as part of governmental activities. Both regulations state that the publisher be informed that official material is "**not subject to copyright law**". In addition, two copies of each official journal article must be submitted to DTIC while only the SF 298 will be submitted for unofficial material. It is recommended that DTIC receive all journal articles.

Not all information generated from RDT&E efforts must be formally documented. Both AFR 83-1 and AR 70-45 list the same exceptions:

1. Preliminary informal results of studies that require dissemination for immediate action.
2. Reports prepared to convey fiscal, administrative, or other nontechnical information.
3. Progress or letter reports prepared by contractors or grantees primarily to indicate, for administrative purposes, the status of R&D efforts.
4. Technical reports prepared primarily to satisfy requests from organizations outside the Department of Defense (DoD) and that essentially duplicate the primary official government document.

The publishing of DoD RDT&E efforts is changing. The "technical report" has many new names and nonprint formats. In addition, the purpose of the technical publication - to present the final results of a DoD RDT&E effort - is changing. Should publications be prepared throughout the life cycle of a project? Should any information that is useful beyond the project office be published? **No matter what local types and variations exist at your organization, if STI is disseminated outside the activity, it should be treated as a technical publication and meet all STINFO program requirements and procedures.**

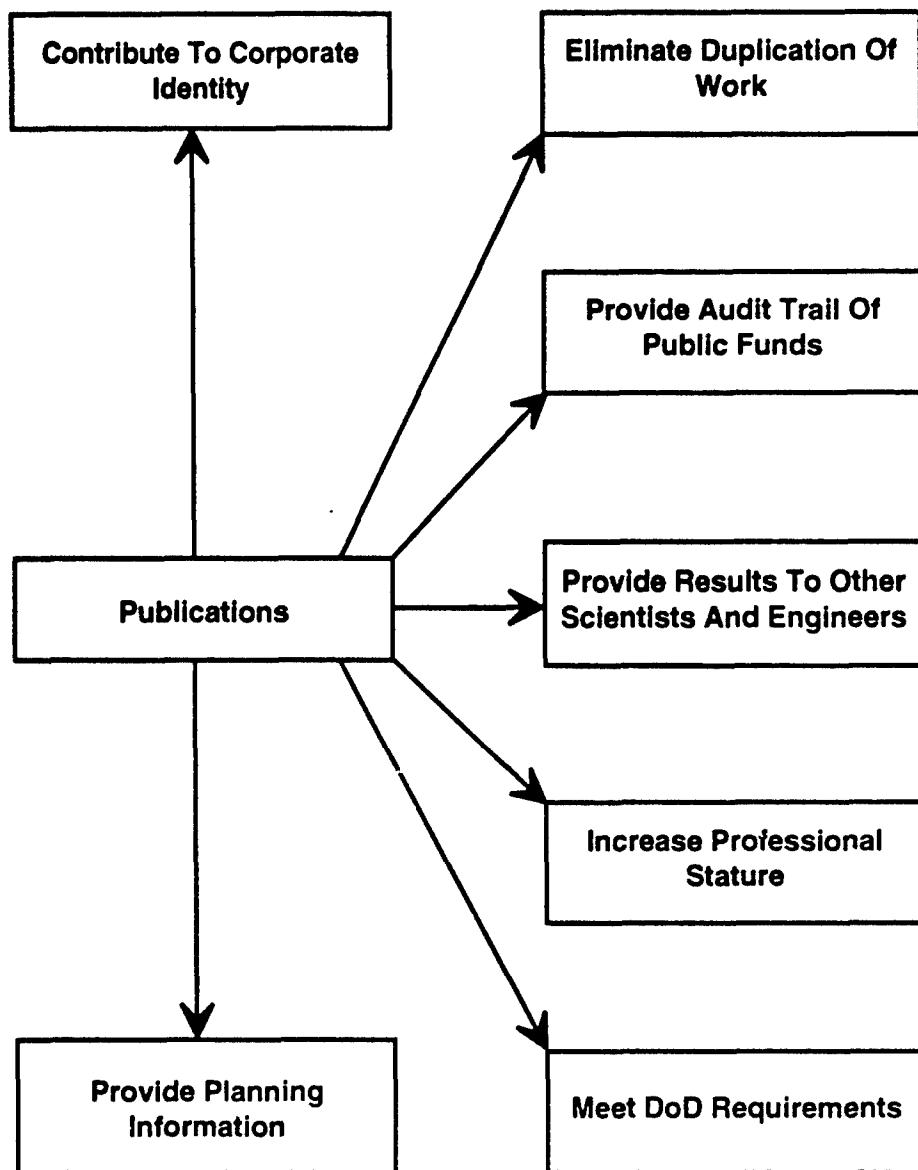


Figure 14 - Why Publications are Necessary

9.2 TECHNICAL PUBLICATION TRACKING

The STINFO Manager is responsible for tracking all technical publications from their specification on the DD Form 1423, *Contract Data Requirements List (CDRL)*, if under contract, to the introduction of a new work unit, and finally, to the distribution of the resulting publications. A tracking system is an accounting system because all the STI products produced in-house or under contract are accounted for. The system contains information on the status of projected, in-process, and final publications and has many possible uses. The establishment of a tracking system may be required. AFR 83-2 states that the STINFO Manager should establish one or ensure that another office has one in place. Figure 15 shows some inputs and outputs of a tracking system.

The first requirement of an effective tracking system is to know the sources of potential publications at your organization and to "tap" into them. Three common sources are: a) contractor-generated efforts, b) in-house efforts, and c) technical meetings.

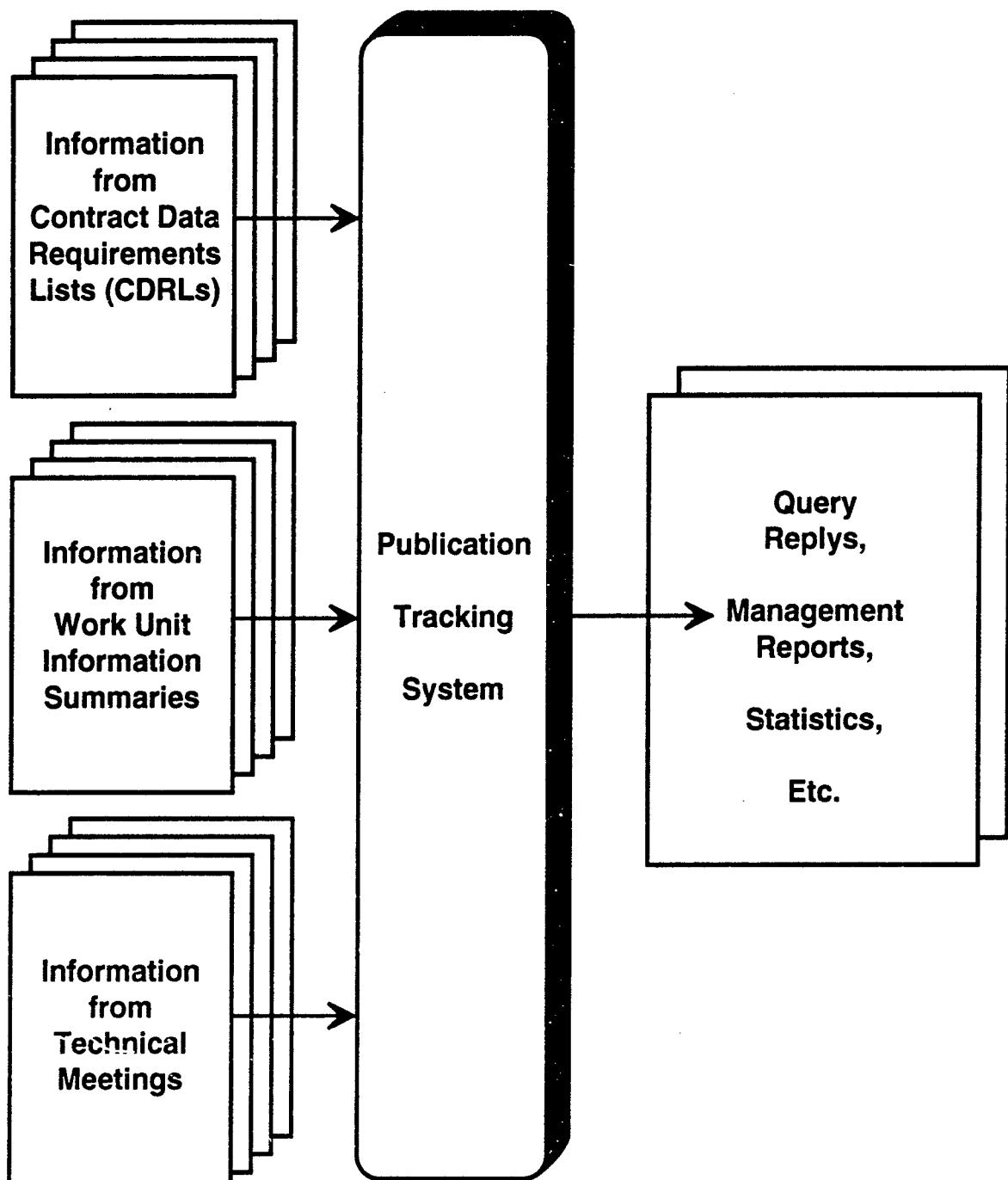


Figure 15 - Technical Publication Tracking

It is easier to identify anticipated contractor publications than in-house publications because all such publications should be identified on the CDRL (see Section 9.6). Coordination with the Data Management and Contracting Offices is necessary to tap into this data source. Another way to identify such publications is through the submissions to the WUIS database.

It is harder to identify anticipated in-house publications, but the process is aided by the WUIS requirement. Each work effort at your organization will probably equate to one or more technical publications. Therefore, by monitoring submissions to the WUIS and contacting responsible DoD personnel, you can anticipate future publications. Since you have access to the WUIS database, downloading selected information from either a local database or the Defense RDT&E Online System (DROLS) will make the task easier. Some in-house publications, such as journal articles, are harder to track because they have been published outside the STINFO loop. Since the STINFO Manager plays an important role in the controlling and disseminating of STI, it is important that you seek ways to include all relevant publications, including journal articles, in the STINFO loop and in your tracking system.

The complexity of a tracking system is clearly a function of the number of technical publications generated by the organization and its contractors and what data elements should be included. If a limited number of publications are produced, a simple notebook system will be sufficient and you should resist the temptation to computerize the operation. However, if a large number of publications are processed, then a computer-based system is a necessity. Since the application is a simple one, the most basic database management system can be used.

Some suggested data elements in a tracking system are:

1. Identification Information

Record Number (STINFO assigned)
Report Number (STINFO assigned)
AD Number (when assigned by DTIC)
Work Unit Accession Number (from WUIS)
Title/Subject (e.g., from WUIS, CDRL)
Author (e.g., from WUIS, CDRL)
Responsible DoD Person/Office (e.g., from WUIS, CDRL)
Contract or In-House (e.g., from WUIS, CDRL)
Contract Number (from WUIS or CDRL)

2. Basic Tracking Information

Status (STINFO assigned)
Contract/In-House Start Date (e.g., from WUIS, CDRL)
Estimated Completion Date (e.g., from WUIS, CDRL)
Date Due from Contractor/In-House Personnel (e.g., from WUIS, CDRL)
Overdue Date (STINFO assigned)
Date Received in STINFO Office (STINFO assigned)

3. Processing Information (all STINFO assigned)
Date to/from Editing
Date to/from Composition
Date to/from Author Proof
4. Processing Information (all STINFO assigned) continued
Date to/from Technical Review
Date to/from STINFO Review
Date to/from Security
Date to/from Public Affairs
Date to/from Printing
Date Distributed
Date Requested
Notes/Comments

There will be other data elements to consider, depending upon your local situation. For each data element you plan to include, the following should be identified: a) the precise source, b) how and when the data item will be entered into the system, and c) how the data item will be maintained in the case of variables, such as projected completion date. You should consider dropping any data element that you can not fully account for and do not add extra, unnecessary elements for the sake of "completeness". Historical data on each of the organization's publications are useful, and therefore, records should be retained in the tracking system. In addition, the data will be needed when you receive requests for documents, e.g., the Form 55 process.

The actual data elements collected in a tracking system are a consequence of the possible uses of the system. Some uses are:

1. Responding to queries about the specific status of a technical publication.
2. Generating regular status reports summarizing all identified future and in-process publications. These status reports will be important to your organization's management and will provide you with the "big picture" of this aspect of your job.
3. Generating summary statistics needed to measure performance. Since one of the goals of the STINFO program is the timely processing and distribution of all publications, the generation of regular summaries provides the STINFO office with the statistics against which performance can be measured. In addition, reporting on the program's effectiveness is a requirement in the Air Force and Army programs.
4. Alerting you and the organization's management to potential problems, such as publications that are overdue in reaching the STINFO process and those which are delayed in processing.
5. Triggering reminders to the contract monitor or other authorized government representative that the DD Form 250, *Material Inspection and Receiving Report*, should not be signed until the required publication is determined to be acceptable.

Don't reinvent the wheel! There are tracking systems in place at various DoD activities. You should ask your colleagues for advice.

9.3 TECHNICAL PUBLICATION PROCESSING

In addition to tracking technical publications, the STINFO Manager plays an active role in the processing of the publications. Duties include:

1. Providing guidance to the author/contract monitor on the various forms, formats, and procedures to follow to publish.
2. Conducting a qualitative review of each publication, particularly the completed SF 298, the assigned distribution statement, and required markings.
3. Coordinating the various steps, e.g., editorial, composition, reviews, printing, and distribution, in getting a publication "out-the-door".
4. Examining and updating procedures on a continuing basis to minimize publication processing time.

It is not part of the STINFO duties to fill out the SF 298 or assign distribution statements. It is also not a STINFO duty to bring substandard publications up to the quality levels expected by the organization.

There is a mistaken impression among working level personnel about the role the STINFO office plays in the processing of publications. The STINFO office serves as the coordinating, guiding, and reviewing focal point. It is very important that you and the user community understand the STINFO role. Of course, local policies will influence your responsibilities.

9.4 STINFO QUALITATIVE REVIEW

A technical publication must go through a number of separate review steps, including the STINFO qualitative review. Four common steps are:

1. **Technical Review** - for quality and technical accuracy of publication contents and for approval.
2. **STINFO** - for qualitative review.
3. **Editing** - for proper grammar, punctuation, format, clarity, conformance to local style requirements, and conformance to standards.
4. **Public Affairs** - for Security and Policy Review of all publications marked with Distribution Statement A (unclassified, unlimited).

The STINFO Manager should ensure that the contents, distribution statement, markings, SF 298, and adherence to style requirements/format standards of every technical publication leaving the organization is reviewed. This is in addition to all other review procedures in effect at the organization.

The qualitative review should include the following:

1. Does the publication have a meaningful title?
2. Is the SF 298 complete?
3. Does the abstract on the SF 298 present a true reflection of the publication's contents?
4. Have the subject terms for controlled vocabulary been assigned, based on the *DTIC Thesaurus*. Have locally assigned terms been included?
5. Does the format conform to ANSI Z39.18-1987 and/or local style requirements?
6. Does the assigned report number conform to ANSI Z39.23-1990 and/or local requirements?
7. Has the document been assigned an appropriate distribution statement and is it marked correctly?
8. Have classification markings been placed correctly, if appropriate?
9. Is the export control notice marked correctly, if appropriate?
10. Are all appropriate special notices marked correctly?

9.5 REPORT DOCUMENTATION PAGE (SF 298)

The SF 298 is a standard form that provides a one page summary of the bibliographic information, identifying a unique technical publication. It replaces DD Form 1473. DTIC uses this form for processing and announcing. The bibliographic information contained on the SF 298 is the basis for the Technical Report record on the Defense RDT&E Online System (DROLS). The form should be reviewed by the STINFO Manager as part of the qualitative review.

Detailed instructions for filling out the SF 298 are found on the back of the form. Although the instructions are thorough and clearly stated, all blocks should be checked for errors and omissions. It is important that the information on the form be consistent with the information on the publication, itself, e.g., a) the distribution statement on the SF 298 and document cover are the same and b) the titles on the SF 298 and document cover and title page are the same. Assistance in completing the **Abstract** (block 13) and the **Subject Terms** (block 14) may be needed. Subject terms should be a combination of locally assigned ones and terms from the *DTIC Thesaurus*.

DTIC has developed separate report documentation pages for nonprint publications: DTIC Form 503, *Videorecording Report Documentation Page*; DTIC Form 504, *Computer Diskette Documentation Page*; and DTIC Form 505, *Magnetic Tape Documentation Page*.

Each technical publication is required to have a completed SF 298, preferably placed at the front of the publication. All three services require the form. Federal Acquisition Regulation (FAR) 35.010 states that when agencies require that completed reports be covered by a report documentation page, the contractor should submit a copy with the report. The presence of the SF 298 in a publication expedites processing at DTIC. If physical control and secondary distribution by DTIC is not appropriate, a completed SF 298 for the publication should be submitted for announcement on DROLS. The requirement for this bibliographic description is stated in DoD Directive 3200.12.

Copies of the four report documentation pages are found in the STINFO Documentation binder of your training material.

9.6 AMERICAN NATIONAL STANDARD INSTITUTE (ANSI)

There are two ANSI standards that provide guidelines for the preparation of technical publications.

ANSI Z39.18-1987, *Scientific And Technical Reports: Organization, Preparation and Production*, has replaced MIL-STD-847B, *Format Requirements for Scientific and Technical Reports Prepared by or for the Department of Defense*, 1983. This new standard is very similar to the old, and users of MIL-STD-847B should have no trouble converting to the new standard. Topics covered are:

1. **Report Organization:** the order of elements and the order and organization of all front matter, text matter, and back matter.
2. **Report Preparation:** format, terminology, inclusion of formulas, layout of graphs and tables, etc.
3. **Report Production:** graphic design, typography, layout and assembly, reproduction, and binding.

The standard includes illustrations and a useful bibliography. It is not a style guide and does not provide guidance on other types of technical publications, such as journal articles. There are no equivalent standards for technical reports in nonprint media.

The other useful standard is ANSI Z39.23-1990, *Standard Technical Report Number (STRN) Format and Creation*. The purpose of this standard is to provide a uniform format for the creation of unique but compatible technical report numbers. It can be used for both paper and nonprint reports.

DTIC encourages the use of both these standards. The use of ANSI Z39.18 is not mandatory in the Air Force and Army, but both AFR 83-2 and AR 70-45 recommend its use. SECNAVINST 3900.29, *Standard Format Requirements for Scientific and Technical Reports*, requires the use of ANSI Z39.18. The use of the STRN is mandatory in Air Force publications.

Copies of the two standards are found in the STINFO Documentation binder of your training material.

9.7 PUBLICATION PROCESSING TIME

DoD Directive 3200.12 states that the overriding priority of the STIP is to ensure timely and effective exchange among DoD RE and studies performers and managers of all STI generated by or relevant to the pursuit of DoD R&E programs. This says it all. The goal is to get the information disseminated and not to delay publication unnecessarily.

The distribution of publications within six months is the usually stated goal, and the STINFO Manager has an important role to play in minimizing the time between the end of an RDT&E effort and distribution of the resulting publication. It is your responsibility to examine the processing procedures at your organization on an ongoing basis to determine where the process can be accelerated. This goal provides one of the major rationales for having a publication tracking system. Summary statistics will identify processing times at each point in the process.

9.8 PRIMARY AND SECONDARY DISTRIBUTION

Primary distribution is defined as initial distribution, both internal and external, of in-house and contracted publications. Figure 16 identifies some of the possible organizations on primary distribution. The Controlling DoD Office, which is usually the activity that produced the work, determines which organizations can receive a publication. Secondary distribution refers to subsequent distribution, usually in response to a request, and is the responsibility of a repository such as DTIC. It is the STINFO Manager's responsibility to ensure that all technical publications are properly and efficiently disseminated through primary distribution. AFR 83-1 states that the STINFO Manager is the Office of Primary Responsibility (OPR) for STI dissemination. One of your main duties is to maintain an up-to-date primary distribution list. Both AFR 83-2 and AR 70-45 state this requirement.

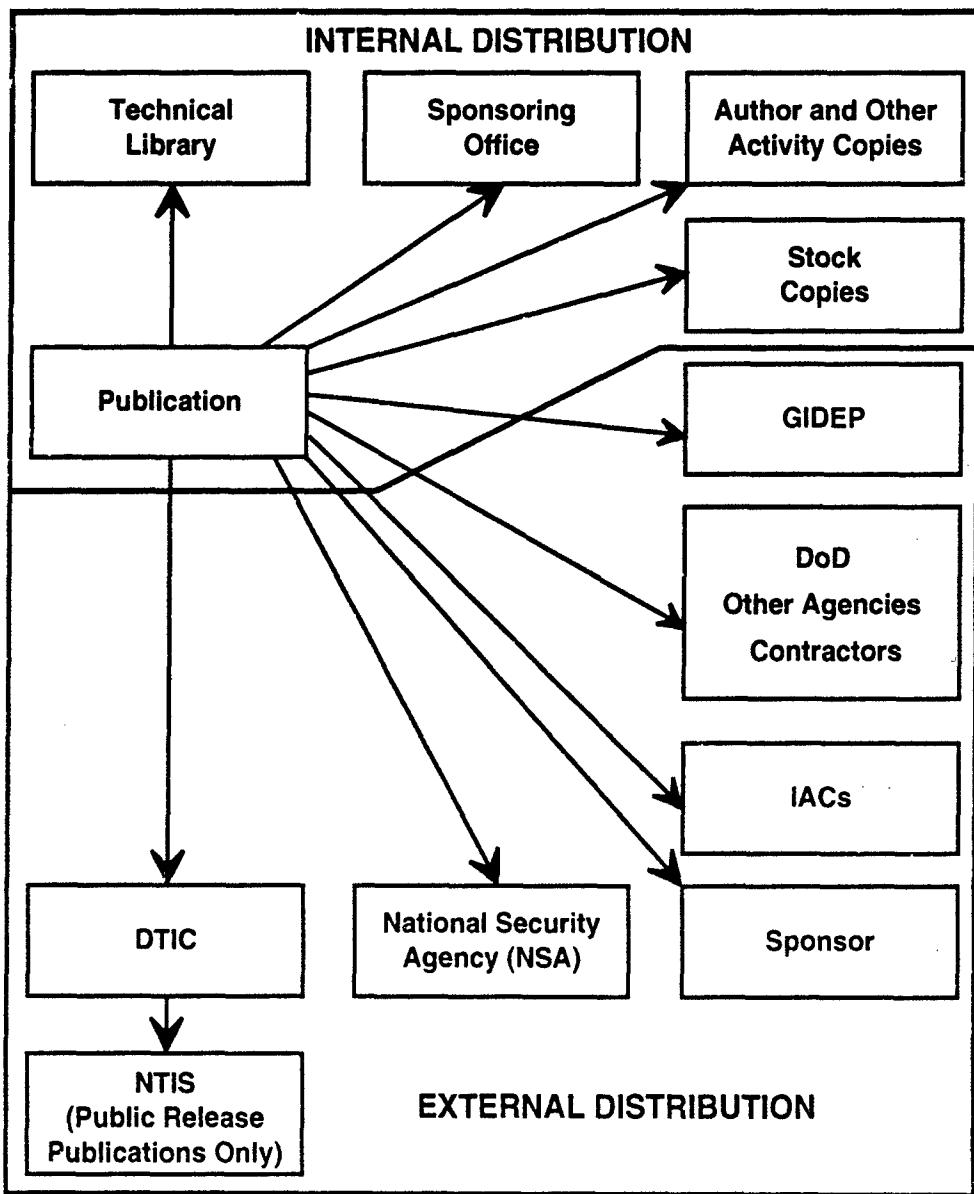


Figure 16 - Primary Distribution of Publications

Some points to remember regarding distribution:

1. Publications should be distributed as widely as possible, within established security controls and distribution and export control limitations. For example:
 - a. Classified reports can only be distributed to those with a need-to-know, valid security clearance, and proper storage facilities.
 - b. Foreign addressees must have approval of the Foreign Disclosure Policy Office.
 - c. Export-controlled publications can only be distributed to contractors listed on the *Certified Contractor Access List (CCAL)*.
2. Addressees on primary distribution lists include internal organizations, such as the sponsoring office and library, and external organizations, such as the outside sponsor, DoD, other government agencies, contractors, and grantees. The list may be a standard list, a standard list in specific technical fields, or a modified list. There may be mandatory addressees. Both AFR 83-2 and AR 70-45 state mandatory addressees. If appropriate, also distribute to relevant IACs, Information for Industry Offices (IFIO), and the Government-Industry Data Exchange Program (GIDEP). Intelligence and TOP SECRET documents are distributed to the National Security Agency.
3. All publications for public release must be cleared by the Public Affairs Office.
4. Primary distribution should include DTIC. Two copies, a completed SF 298 and DTIC Form 50, *Accession Notice*, should be included. The DTIC Form 50 will be returned to the organization by DTIC when the accession number (AD) has been assigned to the publication.
5. Primary distribution lists should be reviewed and updated at least annually.
6. DTIC provides secondary distribution, announces, and distributes all classified (SECRET and CONFIDENTIAL, not associated with special access requirements) and unclassified publications. It also forwards all public release publications to NTIS for distribution to the general public.
7. DTIC and others on primary distribution should be informed of classification, limitation control, and publication changes at least annually.

The assurance that a publication meets quality standards and is properly and efficiently distributed can be a problem with contracted publications. Direct distribution of publications by contractors instead of the DoD organization is not unusual. AFR 83-2 states that controls should be established so that the DD Form 250, *Material Inspection and Receiving Report*, is not signed by the contract monitor until acceptable camera-ready copies of publications are received by the organization. The STINFO office can then perform its required duties, and distribution is made by the organization. This is the recommended procedure.

9.9 DISTRIBUTION STATEMENT REVIEW

Limitation controls and markings will be discussed in Chapter 10, but a few words need to be said about the STINFO Manager's role in reviewing assigned distribution statements. Unlike the security classification system, there is no automatic downgrading for distribution statements. Therefore, all publications marked with Distribution Statements B, C, D, E, F, or X must be reviewed by the Controlling DoD Office. Both AFR 83-1 and AR 70-45 state that distribution statements will be reviewed at least annually. The purpose is to determine if the statement can be broadened. The goal is to use a less restrictive statement whenever conditions permit. Any changes are reported to DTIC.

One approach is to maintain a small local database of the organization's publications, and on a periodic basis, query the controlling office for any distribution statement changes.

In addition to any required reviews, the STINFO Manager will be reviewing distribution statements when requests are received. An example of a request is the DTIC Form 55, *Request for Release of Limited Document*. The instructions for filling out the DTIC Form 55 state that a review should take place concurrently with the release determination, and DTIC should be notified of the results of the review. A letter indicating that the distribution statement can be removed or explaining why it can not be removed should be included.

There is one other benefit to a regular review. Distribution statements have been around for at least 30 years. Release of older information presents a challenge because organizations cease to exist and functions and personnel change. The periodic review of assigned distribution statements helps control this problem.

A copy of the DTIC Form 55 is found in the STINFO Documentation binder of your training material.

9.10 CONTRACT DATA REQUIREMENTS LIST (CDRL) AND DATA ITEM DESCRIPTION (DID)

Since contractor efforts are one of your sources for potential publications, a basic understanding of two integral parts of a contract -the DD Form 1423, *Contract Data Requirements List (CDRL)*, and the DD Form 1664, *Data Item Description (DID)* - is helpful.

The CDRL is used whenever technical data¹ is required to be delivered under a contract. It specifies all the required deliverables, another name for publications. There are one, two, and four data item CDRLs. Each data item listed corresponds to one deliverable. Some of the fields on the form are:

1. **Authority** (Block 4) - references the Data Item Description number with the title of the DID entered in Block 2.
2. **Requiring Office** (Block 6) - indicates technical office that ensures adequacy of data item.
3. **Distribution** (Block 14) - indicates who is to receive copies of the data item, including technical office, and how many.
4. **Remarks** (Block 16) - additional and clarifying instructions are entered here. For example, a DID can be "tailored down", i.e. only certain instructions on the DID apply.

The CDRL is basically a combination of the referenced DID and remarks. The CDRL is completed by the person who is responsible for the data requirements of the contract. A common name is the data manager. It is processed by the Contracting Office.

^{1/} Technical data can be defined as scientific or technical information recorded in any form or medium. The term will be used again in this training class.

There are two STINFO Manager responsibilities associated with the CDRL. The CDRL is important because it identifies future STI publications. It specifies when the items will be delivered and who within the organization will be receiving them. Coordination with contracting officers and data managers is necessary to ensure that STI requirements are included in all relevant contracts, and that the CDRL becomes a source for your tracking system.

Each data item on a CDRL is referenced to a *Data Item Description (DID)* in blocks two and four. A DID can be called a standard because it states the required content and substance for each deliverable. There are a large number of DIDs in existence, and the complete listing is found in DoD 5010.12-L, *Acquisition Management Systems and Data Requirements Control List (AMSDL)*. The AMSDL contains DID number and keyword indexes for all DIDs cleared for use in defense contracts by the Office of Management and Budget. It also includes lists of cancelled/superseded DIDs, source documents, current Data Management focal points, and DID ordering procedures.

A DID for technical publications defines format requirements and preparation instructions. DI-MISC-80711, *Scientific and Technical Reports*, specifies that ANSI Z39.18 will be used for document format. DI-MISC-80048, *Scientific and Technical Reports Summary*, is used in preparing interim or final summaries. DI-MISC-80508, *Technical Report -Study/Services*, is used to prepare studies and analyses.

Copies of these forms are found in the STINFO Documentation binder of your training material.

9.11 DOCUMENTATION

Major documents that support a technical publications program include:

1. AFR 83-2, *United States Air Force Technical Publications Program*
2. ANSI Z39.18-1987, *Scientific and Technical Reports: Organization, Preparation and Production*
3. ANSI Z39.23-1990, *Scientific and Technical Report Number (STRN) Format and Creation*
4. AR 5-14, *Managing Contracted Advisory and Assistance Services*
5. AR 70-45, *Research, Development and Acquisition Scientific and Technical Information Program (Draft)*
6. *Certified Contractor Access List (CCAL)*
7. DD Form 250, *Material Inspection and Receiving Report*
8. DD Form 1423, *Contract Data Requirements List (CDRL)*
9. DD Form 1664, *Data Item Description (DID)*
10. DI-MISC-80048, *Scientific and Technical Reports Summary*
11. DI-MISC-80508, *Technical Report - Study/Services*
12. DI-MISC-80711, *Scientific and Technical Reports*
13. DoD 5010.12-L, *Acquisition Management System and Data Requirements Control List (AMSDL)*
14. DoD Directive 3200.12, *DoD Scientific and Technical Information Program*
15. DTIC Form 50, *Accession Notice*

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16. DTIC Form 55, *Request for Release of Limited Document*
17. DTIC Form 503, *Videorecording Report Documentation Page*
18. DTIC Form 504, *Computer Diskette Documentation Page*
19. DTIC Form 505, *Magnetic Tape Documentation Page*
20. *DTIC Thesaurus (AD-A226 000)*
21. *FAR 35.010, Scientific and Technical Reports*
22. *SECNAVINST 3900.29C, Standard Format Requirements for Scientific and Technical Reports*
23. *SECNAVINST 3900.43, Navy Scientific and Technical Information Program (STIP) (Draft)*
24. *SF 298, Report Documentation Page*

10. CONTROLLING AND MARKING TECHNICAL INFORMATION

KEY POINTS

- All technical information to be disseminated outside a DoD organization must be reviewed to determine if it must be controlled in accordance with:
 - Security Classification
 - Distribution Statement
 - Export Control
- Distribution statements are different from security classification. A distribution statement limits the secondary distribution of technical information to a certain audience. Anyone outside that audience must be approved by the Controlling DoD Office. A classification level is assigned if the information requires protection for national security reasons.
- Export controls protect U.S. technology with military applications from inadvertent disclosure to foreign countries and foreign nationals and are governed by laws and regulations.
- The classification level, distribution statement, and export control notice are placed in certain locations on technical information and are known as “markings”.
- DoD Directive 5230.24, *Distribution Statements on Technical Documents*, establishes the DoD distribution statement system, including controls for export-controlled information. DoD Directive 5230.25, *Withholding of Unclassified Technical Data from Public Disclosure*, establishes policies, procedures, and responsibilities for the withholding of export-controlled information. The directives do not cover security classification.
- AFR 83-3, *Marking Technical Documents*, and AFR 80-34, *Withholding of Unclassified Technical Data from Public Disclosure*, implement the DoD directives in the Air Force. STINFO Manager responsibilities are covered in AFR 83-1, AFR 83-2, and AFR 83-3. AFR 83-1 states that the STINFO Manager serves as the Office of Primary Responsibility (OPR) for marking of technical documents and withholding of unclassified technical data. AR 70-45 implements the DoD directives in the Army and states the STINFO Manager’s responsibilities. OPNAVINST 5510.161, *Withholding of Unclassified Technical Data from Public Disclosure*, is an implementing regulation in the Navy.
- Military Standard (MIL-STD) 1806, *Marking Technical Data Prepared by or for the Department of Defense*, covers all aspects of the distribution statement and export control marking systems. AFP 80-30, *Marking Documents with Export-Control and Distribution-Limitation Statements*, is a pamphlet that also provides guidance.
- DoD 5230.25-PH, *Control of Unclassified Technical Data with Military or Space Application*, is an excellent overview of the marking systems.
- All classified and unclassified technical information must be assigned a distribution statement, and if appropriate, an export control notice. This is required if the information has not already been released to the public, and it is likely to be distributed outside DoD.
- The definitions of technical information or technical data is broad and includes all types and formats, e.g., technical reports, technical manuals, blueprints, drawings, instructions, computer software and documentation, standards.

- The Controlling DoD Office, which is usually the organization that generates the information, assigns the distribution statement and determines if the information is export-controlled.
- Seven distribution statements and ten supporting reasons are authorized.
- The STINFO Manager is responsible for:
 - Providing guidance to the producers of STI to help them select and apply distribution statements and to determine whether the item should be marked for export control.
 - Having copies of support documentation available for review.
 - Ensuring that producers of STI mark all technical information with appropriate markings.
 - Ensuring that the selected distribution statement is checked for appropriateness and the cited reason makes sense for the particular material. In addition, the distribution statement, security classification, and export control are checked for consistency.
 - Establishing a system to review assigned distribution statements on a regular basis.

Copies of some of the cited regulations are found in the STINFO Documentation binder of your training material.

10.1 DOD DOCUMENT MARKING SYSTEM

TECHNOLOGY REGULATING PROGRAMS

- 1. Information Security**
- 2. Pre-release Reviews**
- 3. Technical Information Distribution**
- 4. Export Control**

Figure 17 - Technology Regulating Programs

There are four separate DoD programs that regulate the flow of DoD technology:

1. **Information Security** - provides for the protection of national security information and involves classification levels.
2. **Pre-Release Reviews** - provides for the reviews carried out by Public Affairs and Foreign Disclosure Policy personnel before the release of information.
3. **Technical Information Distribution** - provides for the dissemination of technical information by distribution statements.

4. **Export Control** - provides a system for releasing technical data that are withheld from public dissemination by an export control notice.

We are mainly concerned with the last two programs and their associated markings. The pre-release reviews are discussed in Chapter 16.

The DoD document marking system has two basic purposes:

1. To facilitate dissemination of technical information by indicating the extent of secondary distribution that is permissible without further authorization or approval of the Controlling DoD Office.
2. To identify documents that contain export-controlled information. Dissemination is controlled by statute or regulation.

Properly applied, the system ensures that DoD STI is released to only those persons and organizations allowed access to the information, and STI that is subject to export control laws is identified and controlled. In short, the system gets information to those who legitimately need it while protecting it from unwanted transfer. It is important to remember that distribution statements and export control are separate and distinct programs, even though export control is part of the distribution statement scheme.

The terms "technical information", "technical data", and "technical data with military and space application" will be used throughout this chapter. They are part of the controlling and marking vocabulary. **Technical Information** can be defined as information, including scientific information, that relates to research, development, engineering, test, evaluation, production, operation, use, and maintenance of munitions and other military supplies and equipment. **Technical Data** can be defined as recorded information that can be used, or adapted for use, to design, engineer, produce, manufacture, operate, repair, overhaul, or reproduce equipment and technology. Both definitions include all types and formats of information, e.g., technical reports, blueprints, technical manuals, specifications, and computer software and documentation.

10.2 CLASSIFICATION MARKINGS

This chapter addresses the markings that protect information during the secondary distribution process. However, some comments should be made about classification.

A classification level is assigned to information requiring protection from unauthorized disclosure in the interest of national security. There are three classification levels:

1. **TOP SECRET** is applied to information that, if disclosed to unauthorized persons, could reasonably be expected to cause exceptionally grave damage to national security.
2. **SECRET** is applied to information that, if disclosed to unauthorized persons, could reasonably be expected to cause serious damage to national security.
3. **CONFIDENTIAL** is applied to information that, if disclosed to unauthorized persons, could reasonably be expected to cause damage to national security.

These levels serve two purposes:

1. They let the user of the information know the degree of required protection.
2. They help when the information is paraphrased, downgraded, or extracted.

The classification of technical information is determined by the content and the source of the information. It is established by the manager of the program generating the information with advice from the cognizant security office. Classified information is made available to a recipient with a need-to-know, valid security clearance, and proper storage facilities.

There is a system of classification markings. Figure 18 summarizes the requirements.

Markings for Classified Material	Use on Classified Material
Overall classification marking (top secret, secret, confidential)	Required
Classification source of material	Required
Declassification date of material	Required
Date of origin of material	Required
Office that originated the material	Required
Distribution statement	Required
Downgrading date of material	If available from source document
Warning notice	If required by source document
Intelligence control marking	If required by source document
Export-control notice	If required by export document

Figure 18 - Basic Marking Requirements for Classified Material

DoD 5200.1-PH and AFP 205-13, both entitled *A Guide to Marking Classified Documents*, offer an excellent overview of the classification markings.

The DoD information security program is governed by four basic regulations:

1. DoD Directive 5200.1, *DoD Information Security Program*
2. DoD 5200.1-R, *Information Security Program Regulation*
3. DoD Directive 5220.22, *DoD Industrial Security Program*
4. DoD 5220.22-R, *Industrial Security Regulation*

Now let's take a look at the distribution statement and export control systems.

10.3 DISTRIBUTION STATEMENTS

A distribution statement authorizes the secondary distribution of STI to an intended audience without additional authorization. It is required on all technical information. The distinction between primary and secondary distribution is important. Primary distribution can include anyone with a legitimate need for the information and capable of handling all other controls on the information, such as security and export controls. Secondary distribution includes anyone not included in primary distribution who requests a copy of the information.

DoD Directive 5230.24, *Distribution Statements on Technical Documents*, is the governing regulation. Some important points:

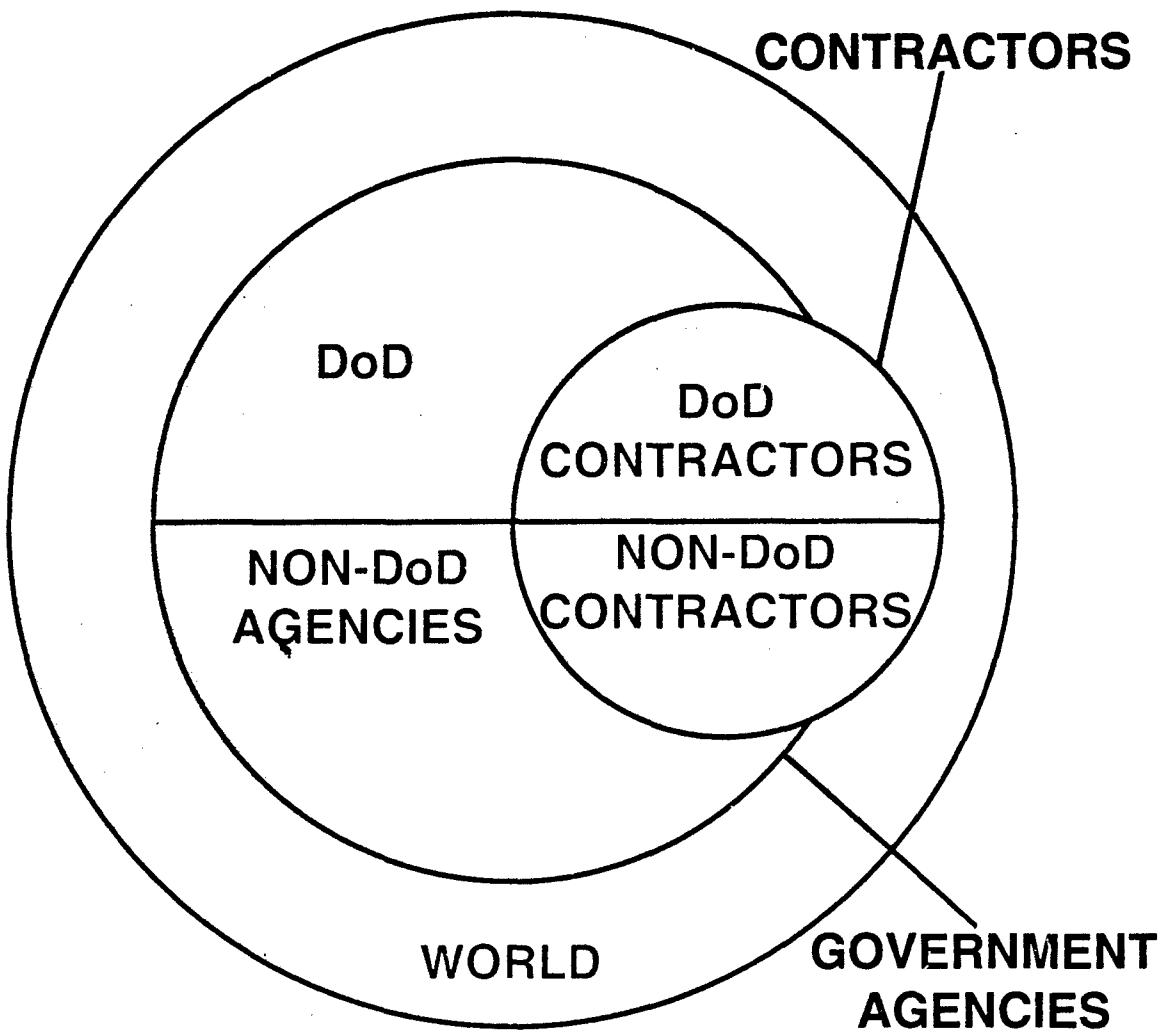
1. All DoD activities generating or responsible for technical documents determine their distribution availability and mark them appropriately before primary distribution.
2. Distribution statements are different from security classification levels. They are used on classified and unclassified documents to restrict dissemination beyond security controls and to control dissemination following declassification.
3. There are seven authorized distribution statements, known by their letters: A, B, C, D, E, F, X.
4. There are ten authorized supporting reasons.
5. Unclassified technical documents are assigned one of the seven statements and classified technical documents are assigned statements B, C, D, E, or F.
6. All types and formats of information must be marked with a distribution statement, e.g., technical reports, drawings, blueprints, software, technical manuals, specifications, microfilm, slides, videotapes.
7. Documents recommended for public release must first be reviewed by the Public Affairs Office.
8. Distribution statements remain in effect until changed or removed by the Controlling DoD Office.
9. Controlling offices must notify DTIC and others of any changes associated with distribution statements, classification markings, or export control statements, including address changes for controlling offices.
10. Distribution statements are displayed conspicuously.

The seven authorized distribution statements provide options ranging from unlimited distribution to no secondary distribution without specific authority of the Controlling DoD Office. In selecting and applying the appropriate statement, DoD officials must consider the information contained in the document and the audience for which it is intended. For example, DTIC distributes all documents marked with Distribution Statement A to NTIS. Its audience is the public, including foreign requesters.

Let's take a look at the statements.

Distribution Statement A

Approved for public release; distribution is unlimited.



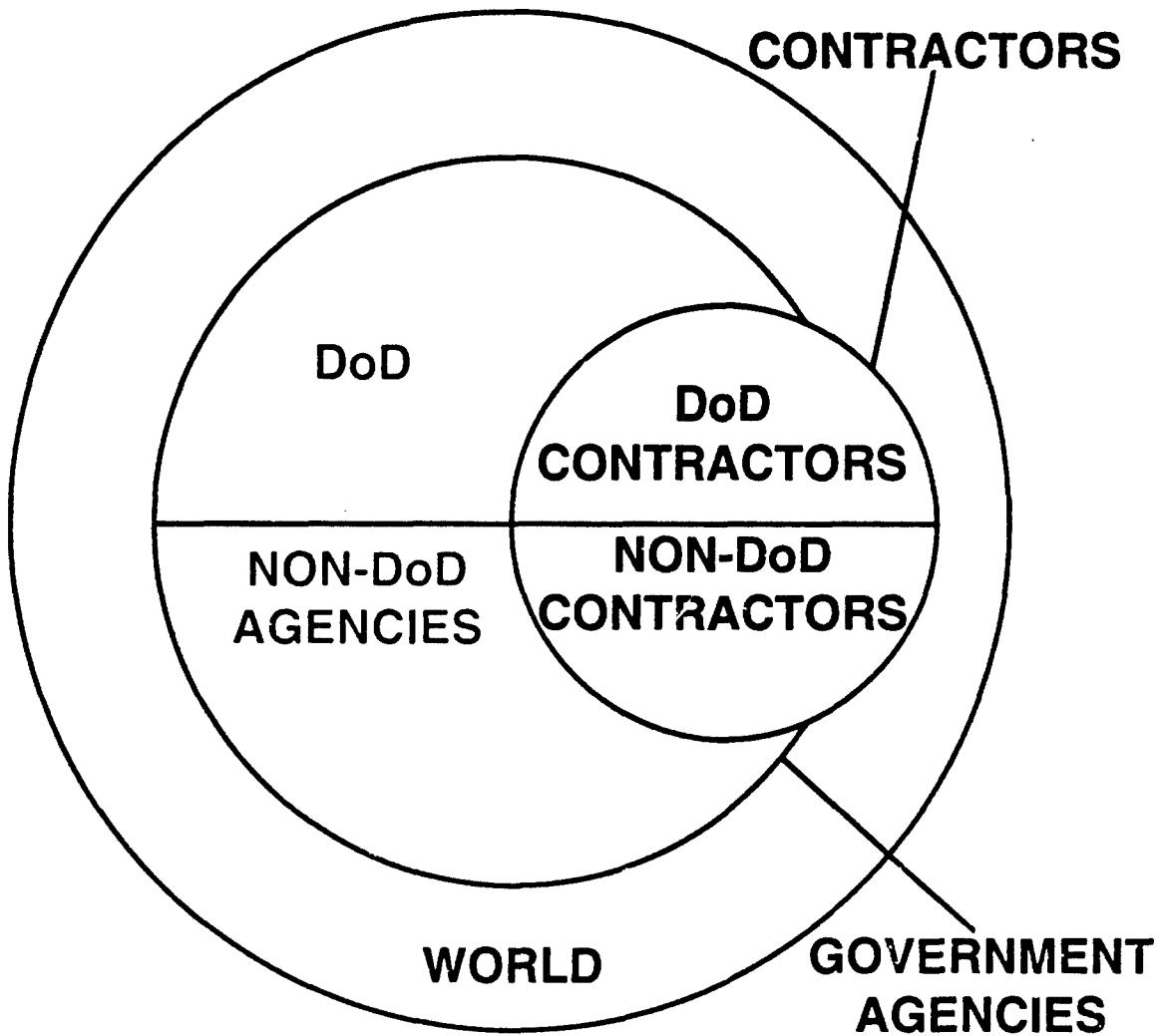
The shaded areas may receive the information.

Figure 19 - Distribution Statement A

Distribution Statement A may be used only on unclassified technical documents that have been cleared for public release in accordance with DoD Directive 5230.9, *Clearance of DoD Information for Public Release*, and do not contain export-controlled data. This statement may be used on documents that were formally classified if cleared for public release in accordance with DoD Directive 5230.9.

Distribution Statement B

Distribution authorized to U.S. Government Agencies only (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office).



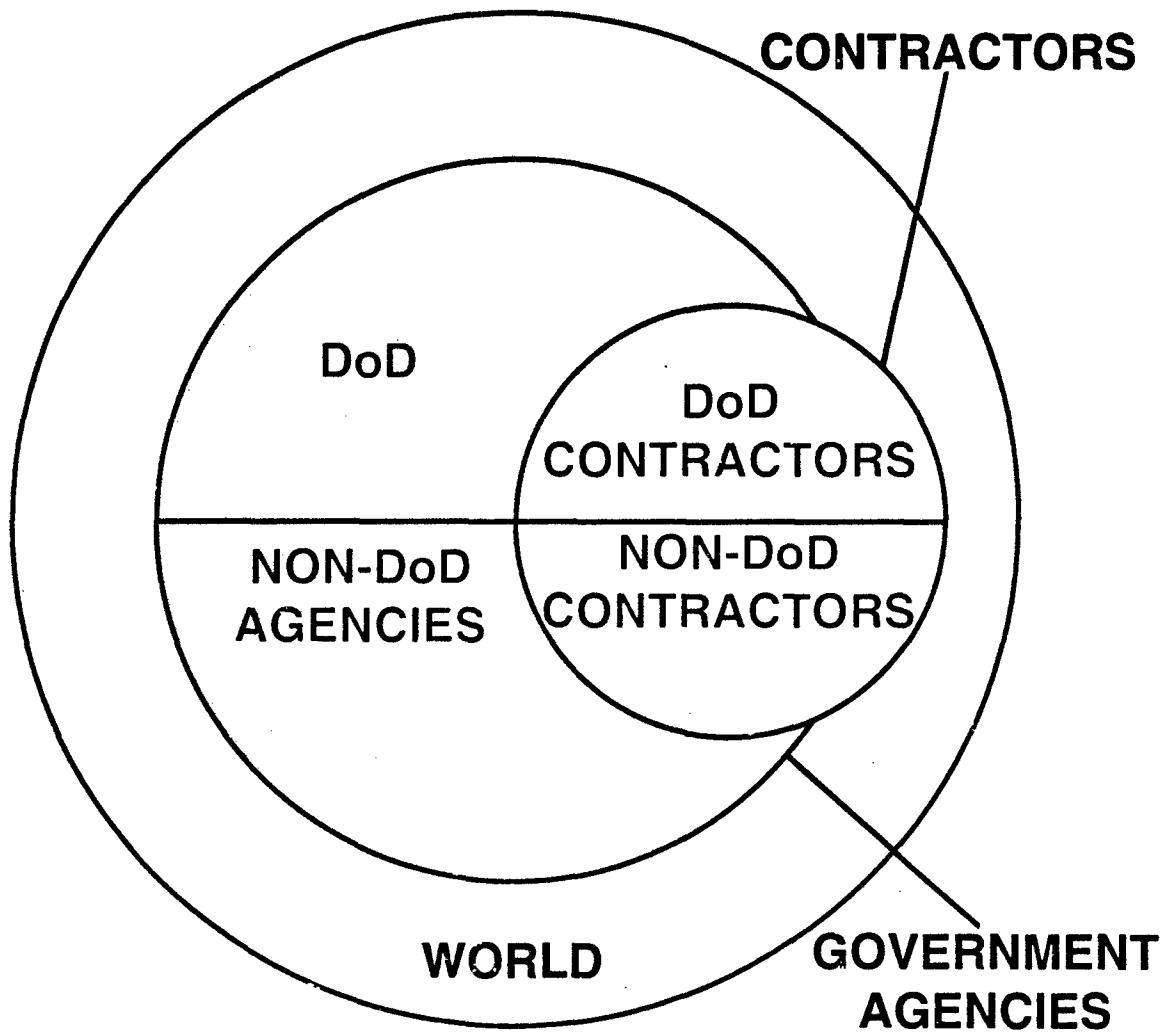
The shaded areas may receive the information.

Figure 20 - Distribution Statement B

Distribution Statement B may be used on unclassified and classified technical documents.

Distribution Statement C

Distribution authorized to U.S. Government Agencies and their contractors (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office).



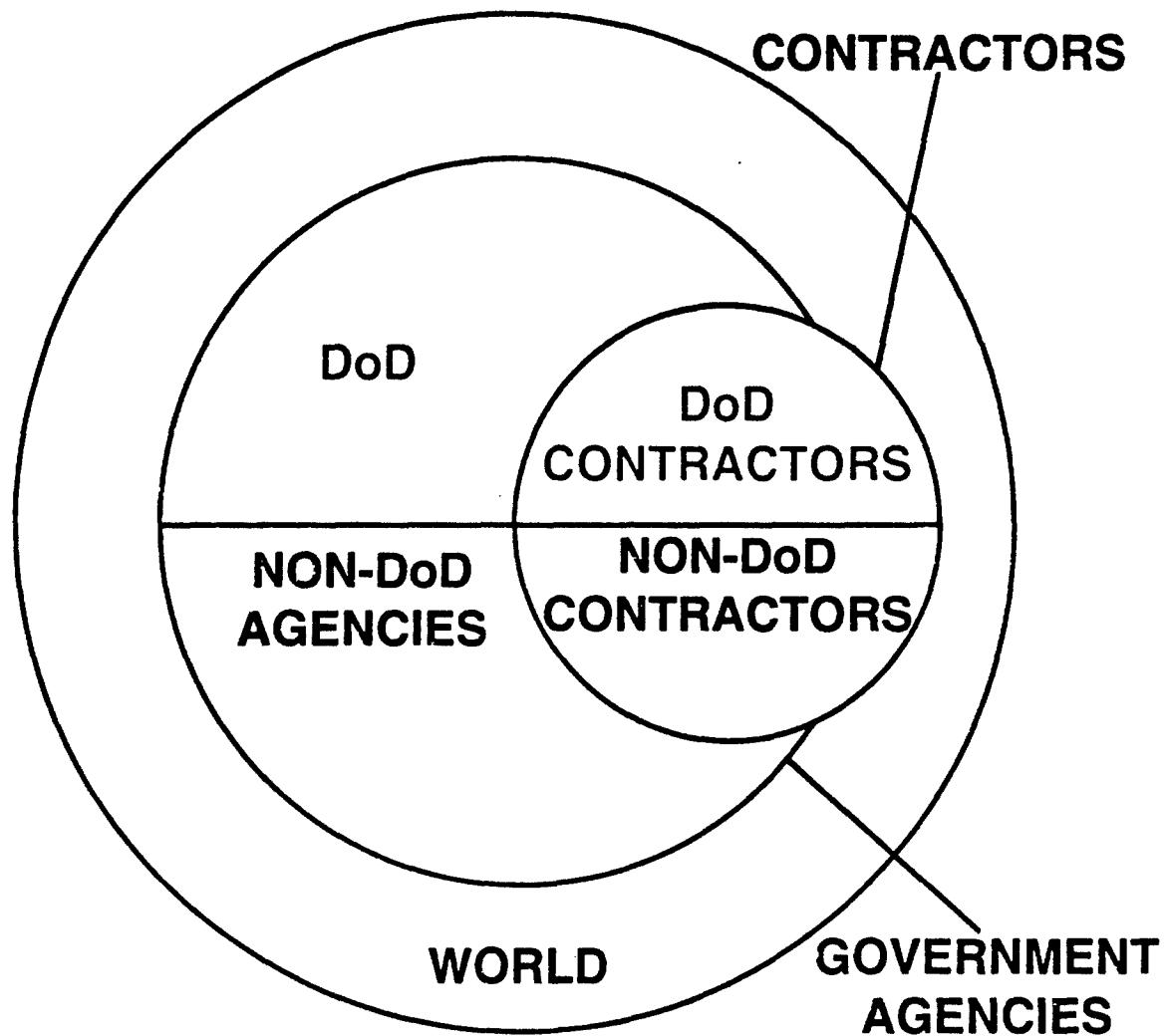
The shaded areas may receive the information.

Figure 21 - Distribution Statement C

Distribution Statement C may be used on unclassified and classified technical documents.

Distribution Statement D

Distribution authorized to the Department of Defense and U.S. DoD contractors only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office).



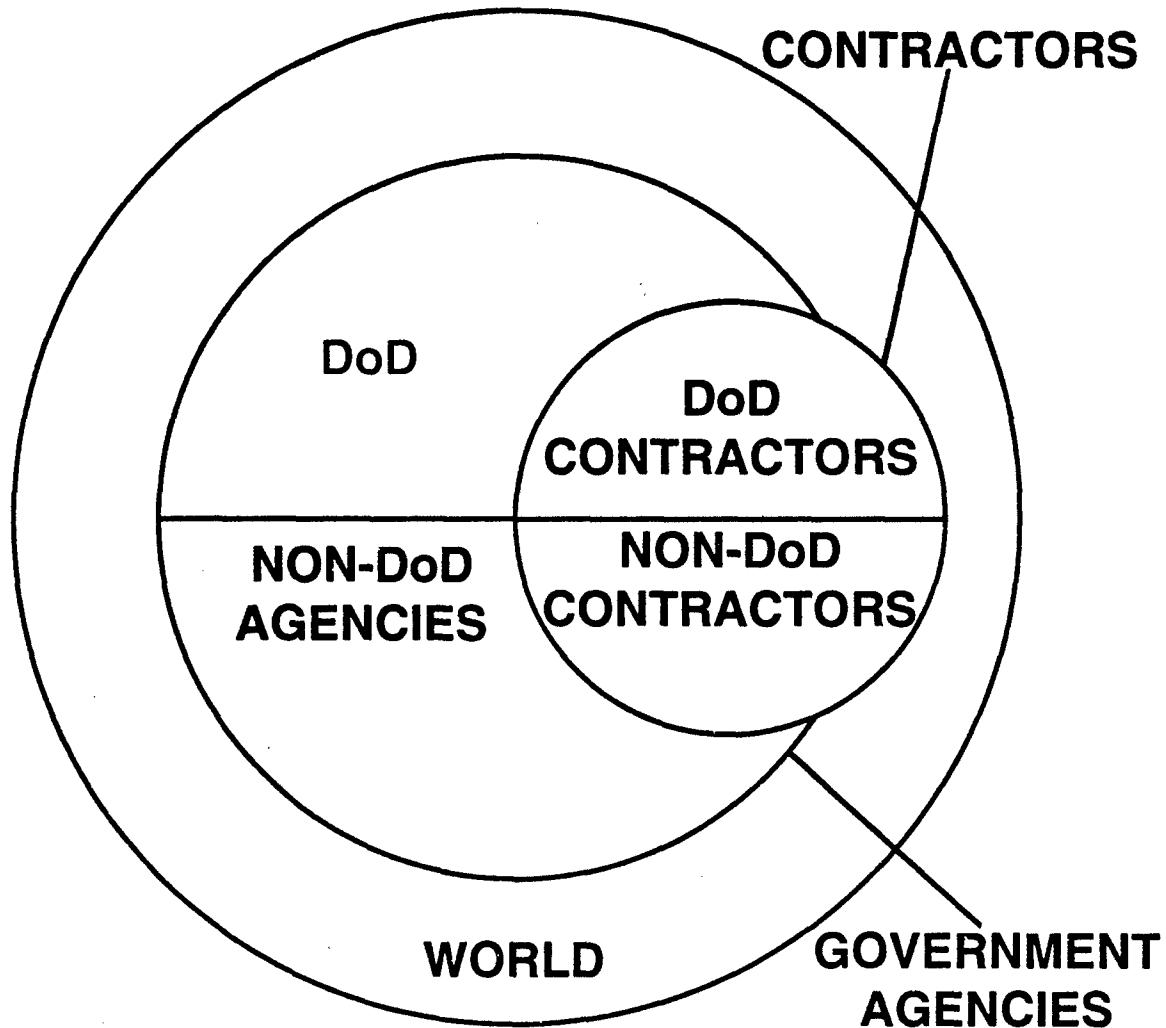
The shaded areas may receive the information.

Figure 22 - Distribution Statement D

Distribution Statement D may be used on unclassified and classified technical documents.

Distribution Statement E

Distribution authorized to DoD Components only (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office).



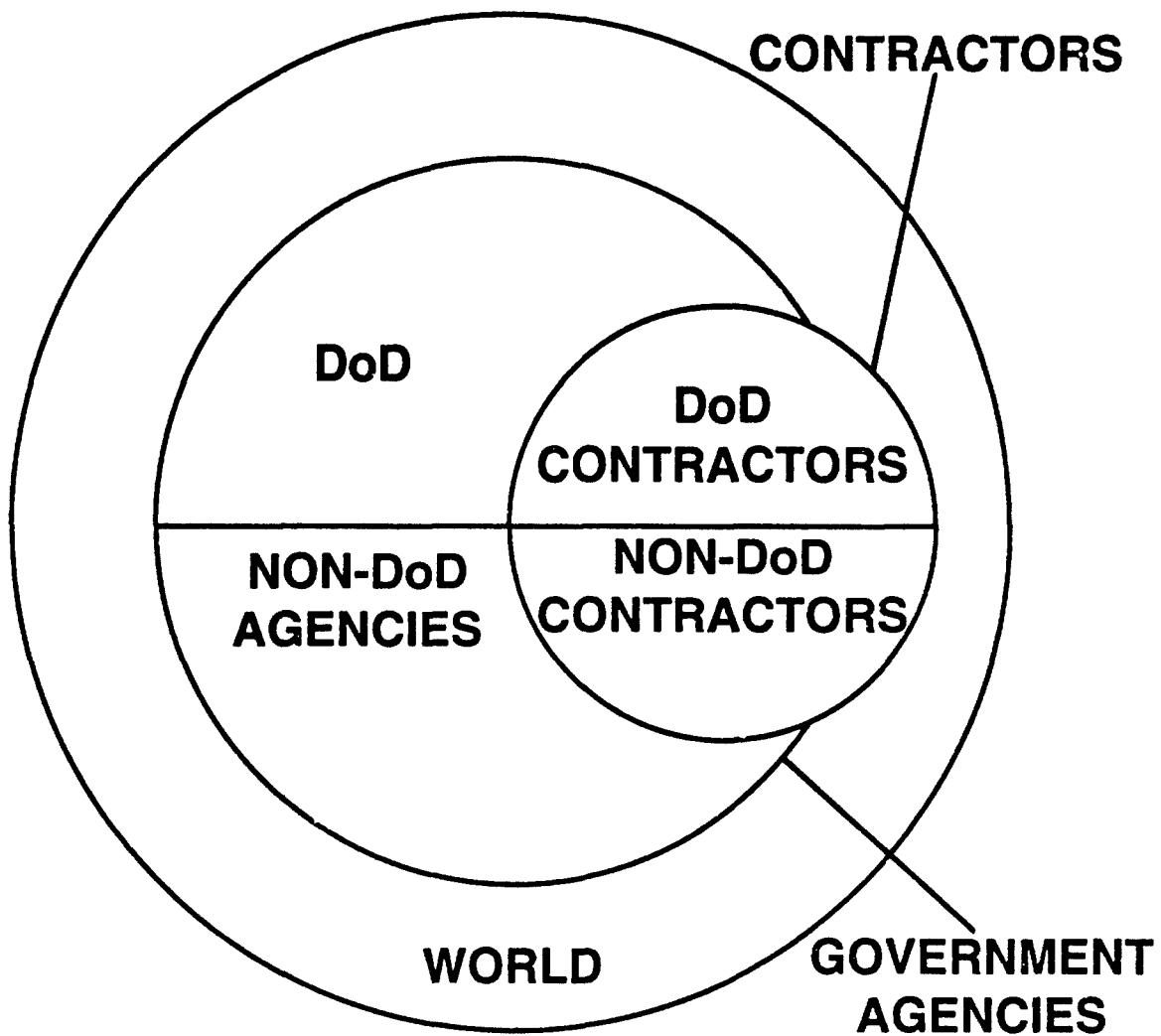
The shaded areas may receive the information.

Figure 23 - Distribution Statement E

Distribution Statement E may be used on unclassified and classified technical documents.

Distribution Statement F

Further dissemination only as directed by (insert controlling DoD office)
(date of determination) or higher DoD authority.



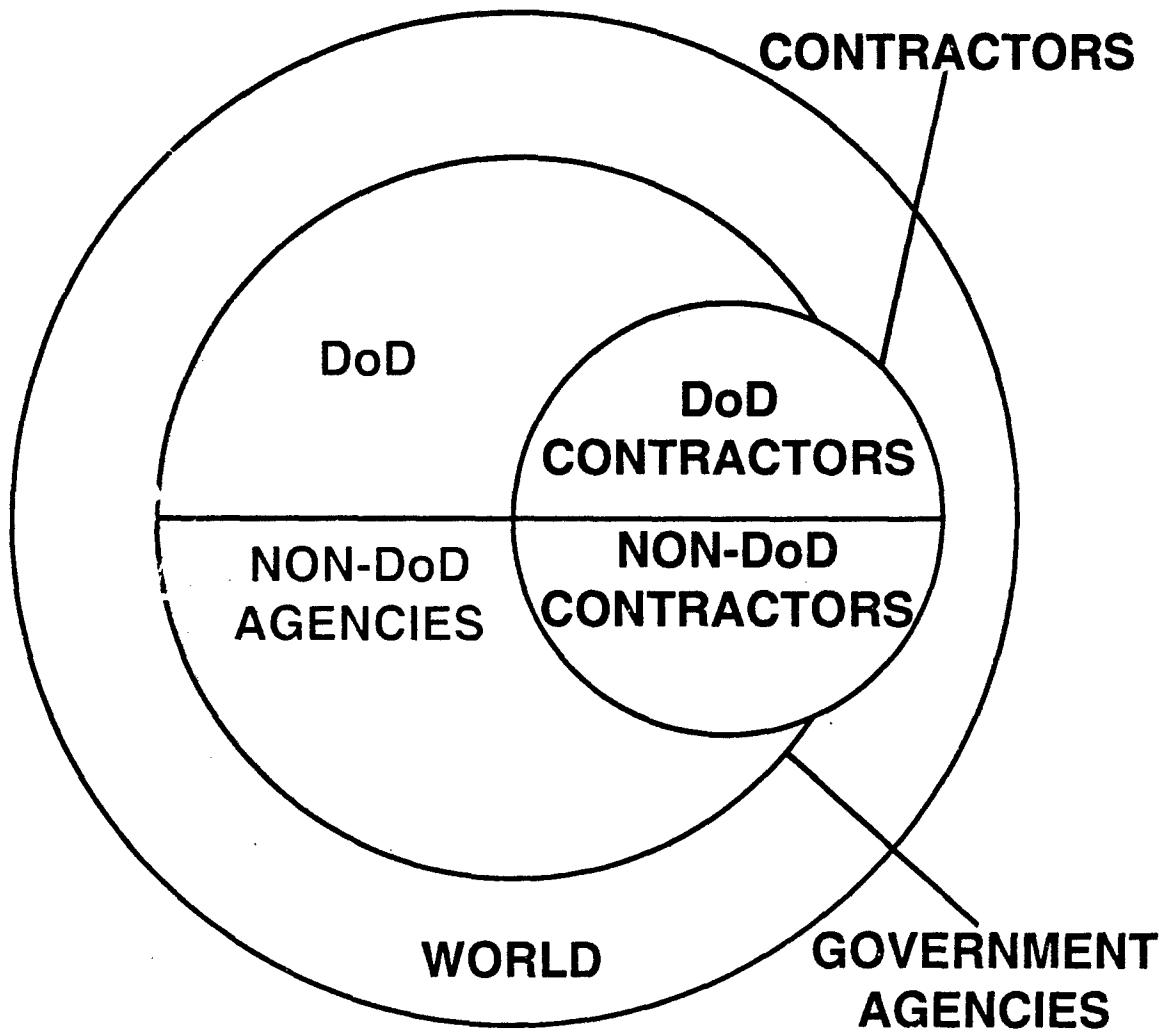
This is the most restrictive distribution statement. Each secondary distribution request is controlled.

Figure 24 - Distribution Statement F

Distribution Statement F is normally used only on classified technical documents but may be used on unclassified technical documents when specific authority exists (e.g., designation as direct military support). This statement is used when the DoD originator determines that the information is subject to special dissemination limitation specified by paragraph 4-505, DoD 5200.1-R, *Information Security Program Regulation*.

Distribution Statement X

Distribution authorized to U.S. Government Agencies and private individuals or enterprises eligible to obtain export-controlled technical data in accordance with DoD Directive 5230.25. Controlling DoD office is (insert).



The shaded areas may receive the information.

Contractor eligibility to receive export-controlled information is determined by certification.

Figure 25 - Distribution Statement X

Distribution Statement X is used on unclassified documents when Distribution Statements B, C, D, E, or F do not apply but the document contains export-controlled data, subject to DoD Directive 5230.25. This statement is not to be used on classified documents but may be assigned to documents that were formerly classified.

Assignment of distribution statements may involve additional restrictions. For example, the Air Force requires the assignment of Distribution Statement B to contractor "limited rights" information and the assignment of Distribution Statement E to software and publications that contain software.

10.4 DISTRIBUTION STATEMENT REASONS

Controlling DoD Offices must provide a reason for selecting statements B, C, D, or E. Reasons are not cited for statements A, F, or X. The purpose of a reason is to draw attention to the type of information in the document and to serve as a flag for other special handling requirements, such as proprietary information. DoD Directive 5230.24 lists ten authorized reasons:

1. **Foreign Government Information** protects and limits distribution in accordance with the desires of the foreign government that furnished the technical information. Information of this type is normally classified at the CONFIDENTIAL level or higher
2. **Proprietary Information** protects information not owned by the U. S. Government. It is protected by a contractor's "limited rights" statement or received with the understanding that it will not be routinely transmitted outside the U.S. Government.
3. **Critical Technology** protects information and technical data that advance current technology or describe new technology in an area of significant or potentially significant military application or relates to a specific military deficiency of a potential adversary. Information of this type may be classified or unclassified. It is considered export-controlled when unclassified and subject to DoD Directive 5230.25.
4. **Test and Evaluation** protects results of test and evaluation of commercial products or military hardware when such disclosure may cause unfair advantage or disadvantage to the manufacturer of the product.
5. **Contractor Performance Evaluation** protects information in management reviews, records of contract performance evaluation, or other advisory documents evaluating programs of contractors.
6. **Premature Dissemination** protects patentable information on systems or processes in the developmental or concept stage.
7. **Administrative or Operational Use** protects publications required solely for official use or strictly for administrative or operational purposes, e.g., manuals, pamphlets, technical orders, technical reports.
8. **Software Documentation** is releasable only in accordance with DoD Instruction 7930.2, *ADP Exchange and Release*, (or service-specific requirements).
9. **Specific Authority** protects information not specifically included in other reasons but is protected by documented authority, e.g., Executive Orders, classification guidelines, and DoD regulatory documents.
10. **Direct Military Support** protects export-controlled technical data of such military significance that release for other than direct support of DoD-approved activities may jeopardize an important military advantage of the United States.

Only certain combinations of distribution statements and reasons are authorized. They make sense and should be used. For example, the reasons for denying contractor access include proprietary information, test and evaluation, contractor performance evaluation, premature dissemination, and direct military support. Figure 26 gives a summary of distribution statements and assigned reasons.

Reasons for imposing distribution statements	Distribution Statements						
	A	B	C	D	E	F	X
Foreign government information		X	X	X	X		
Proprietary information	X				X		
Critical technology	X	X		X	X		
Test and evaluation	X				X		
Contractor performance evaluation	X				X		
Premature dissemination	X				X		
Administrative/operational use	X	X	X	X			
Software documentation	X	X	X	X			
Specific authority (identify)	X	X	X	X			
Direct military support					X		
Public and foreign release	X						
Paragraph 4-505 of DoD 5200.1-R or other specific authority						X	
Export control of unclassified documents (private individuals)							X
A = Unlimited distribution.	E = DoD components only.						
B = U.S. Gov't. agencies only.	F = Further dissemination only as directed.						
C = U.S. Gov't. agencies and their contractors.	X = Agencies, individuals, or enterprises authorized by 10 U.S.C. 140c.						
D = DoD and DoD contractors only.							

Figure 26 - Distribution Statements and the Reasons for Imposing them.

10.5 EXPORT CONTROLS ON TECHNICAL DATA

Export controls, including the control of critical technology, protect U.S. technology with military applications from inadvertent disclosure to foreign governments and foreign nationals. These controls are imposed because acquisition of militarily critical technology by potential adversaries can significantly contribute to their military potential by reducing the risks when designing new weapons and

defensive systems and shortening the research and development cycle. Acquisition of militarily critical technology can also severely undermine our national security by allowing our adversaries to develop countermeasures to our existing and anticipated defense systems.

Export controls are governed by law and implementing regulations. All defense goods and technical data that are subject to export control fall under the *International Traffic in Arms Regulations (ITAR)*, which is under the jurisdiction of the U.S. Department of State, or the *Export Administration Regulations (EAR)*, which are under the control of the U.S. Department of Commerce. The criteria used to determine whether the item comes under one or the other is a function of its inherent capabilities. If the item is deemed to be inherently military in character, it falls under the ITAR. If the item has potential for both military and civilian uses, it falls under the EAR.

Both regulations contain lists that describe technical items that must have licensing or approval before their legal export. The ITAR contains the *U.S. Munitions List*, and the EAR contains the *Commodity Control List (CCL)*. The regulations and lists are contained in the *Code of Federal Regulations (CFR)*.

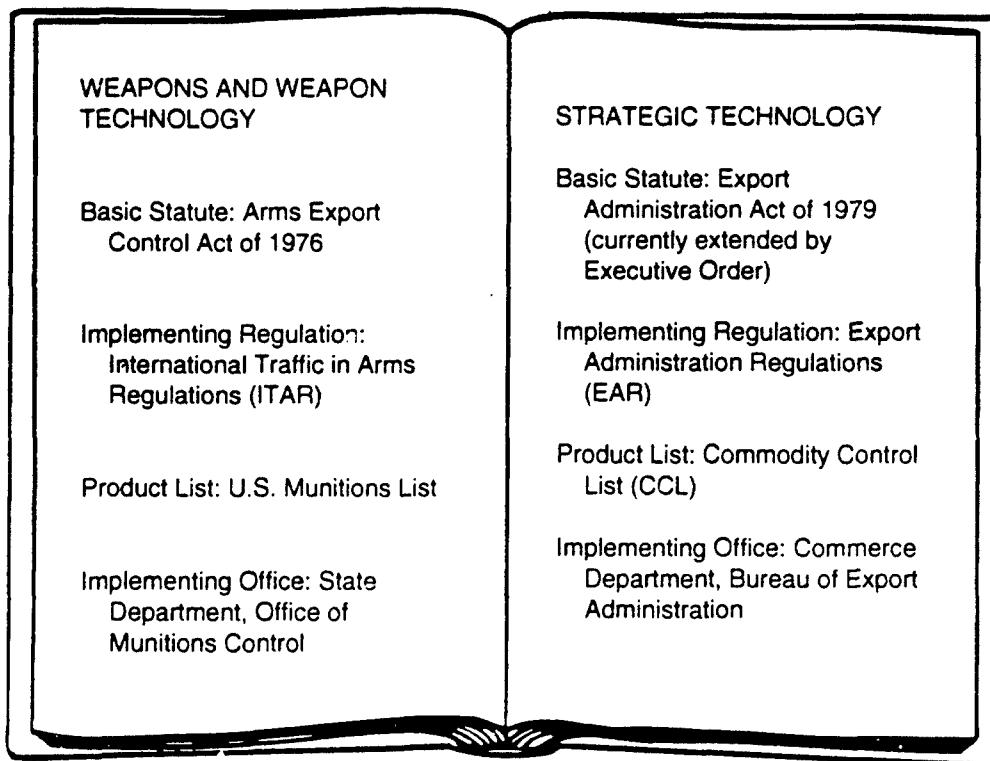


Figure 27 - U.S. Export Laws

10.6 INTERNATIONAL TRAFFIC IN ARMS REGULATIONS (ITAR) (22 CFR 120-130)

The ITAR prohibits the export and import of defense articles and defense services without the approval of the Department of State. **Defense Article** is defined as anything included on the *U.S. Munitions List* and includes technical data associated with these articles. **Defense Service** is defined as assisting (including training) foreign persons in the design, engineering, development, processing, manufacture, use, operation, ... of defense articles or the furnishing to foreign persons of any technical data, whether in the United States or abroad.

According to the ITAR, technical data is defined as:

1. Classified information relating to defense articles and services.
2. Information covered by an invention secrecy order.
3. Information that is directly related to the design, engineering, development, production, processing, manufacture, use, operation, overhaul, repair, maintenance, modification, or reconstruction of defense articles. For example, this includes blueprints, drawings, photographs, plans, instructions, computer software and documentation. It also includes information that advances the state of the art of articles on the *U.S. Munitions List*. It does not include information concerning general scientific, mathematical, or engineering principles.

The definition of technical data is broad and covers all information that may relate to items on the *U.S. Munitions List*.

The ITAR contains:

1. General information on the ITAR itself.
2. The *U.S. Munitions List*.
3. Registration procedures for exporters and manufacturers and license procedures for exporting the controlled materials.
4. The penalties for violation of the regulations.

10.7 U.S. MUNITIONS LIST (22 CFR PART 121)

The *U.S. Munitions List* is the heart of the ITAR. It is a subject-organized list of defense articles, services, and related technical data and is about nine pages long. Some items on the list are marked by an asterisk, indicating that they are “**significant military equipment**” and subject to even more stringent controls. Changes (and clarifications) to the list are issued through the *Federal Register* and the *Munitions Control Newsletter*, published by the Office of Munitions Control.

The list is quite specific concerning military hardware such as “underwater sound equipment, including but not limited to towed arrays, electronic beam forming sonar,...”. The phrase “but not limited to...” is quoted throughout the list, indicating that items not listed are probably subject to the same controls as items on the list. The determination of whether an item is included on the list is made by the Office of Munitions Control, Bureau of Politico-Military Affairs, Department of State, Washington, D.C. 20520. Determination procedures are outlined in 22 CFR Part 120.

10.8 EXPORT ADMINISTRATION REGULATIONS (EAR) (15 CFR PARTS 768-799)

Export Administration Regulations are the responsibility of the Department of Commerce and provide export control policies and practices on almost ALL GOODS AND TECHNOLOGIES, including those with potential for military use. A validated license is required from the Department of Commerce to not only export materials, but also to export the technical data relating to the controlled materials.

Technical data is defined as information of any kind that can be used, or adapted for use, in the design, production, manufacture, utilization, or reconstruction of articles or materials. The controlled data may take the form of a model, prototype, blueprint, or operating manual. All software is considered technical data. Basically, technical data relating to the commodities on the CCL is prohibited from export without a license.

10.9 COMMODITY CONTROL LIST (CCL) (15 CFR PART 799.1)

The CCL is the heart of the Export Administration Regulations and is about 220 pages long. It is a detailed listing prepared by the Department of Commerce to control the export of goods and technologies that may significantly contribute to the military potential of foreign countries, thereby adversely affecting the national security of the U.S.

The CCL is broken down into ten general commodity categories, and each category contains five groups of products. The ten general categories are:

1. Materials
2. Materials Processing
3. Electronics
4. Computers
5. Telecommunications and Cryptography
6. Sensors
7. Avionics and Navigation
8. Marine Technology
9. Propulsion Systems and Transportation Equipment
10. Miscellaneous

Each entry contains:

1. The Export Control Classification Number (ECCN)
2. Types of controls, e.g., COCOM
3. Requirements, such as:
 - a. Country groups for which a validated license is required
 - b. Reason for control, e.g., "national security" is a common reason
 - c. General license dollar value
4. List of controlled items

For your information, COCOM stands for Coordinating Committee for Multilateral Export Control, an organization that cooperates in restricting strategic exports to controlled countries. There are currently 17 member nations.

10.10 EXPORT CONTROL AND DOD

Conflicting legislative policy posed a dilemma for DoD in its attempts to protect technology from unauthorized disclosure. For example, the *Freedom of Information Act (FOIA)* did not provide for withholding unclassified technical data from requesters, including foreign nationals, even though export of the technical data would be otherwise restricted by the regulations implementing export control laws. The release of such data into the public domain was tantamount to uncontrolled foreign access. Public Law 98-94, *The Department of Defense Authorization Act of 1984*, gave DoD the authority to withhold from public disclosure certain scientific and technical data with military and space applications. DoD Directive 5230.25, *Withholding of Unclassified Technical Data from Public Disclosure*, implemented the new policy, and DoD Directive 5230.24, *Distribution Statements on Technical Documents*, now includes controls for export-controlled technical data.

There are four criteria that must be met to withhold unclassified technical data from public disclosure:

1. The information is in the possession of or is controlled by DoD.
2. The information has a military or space application.
 - The information can be used, or adapted for use, to design, engineer, produce, manufacture, operate, repair, overhaul, or reproduce military or space equipment and related technology.
3. The information may be exported only with the approval, authorization, or license under U.S. export control laws.
4. The information discloses critical technology.
 - Critical technology or militarily critical technology is essentially information that reveals production "know-how".

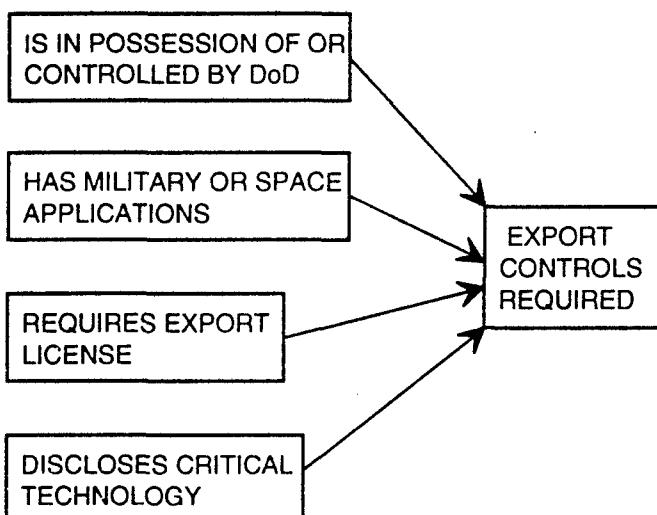


Figure 28 - Criteria that Must be met for Export Controls to be Required

It is important to remember that technical data with military or space application can be recorded in a variety of types and formats, such as:

- blueprints
- videotapes
- instructions
- reports
- drawings
- specifications
- plans
- manuals
- software
- films
- software documentation

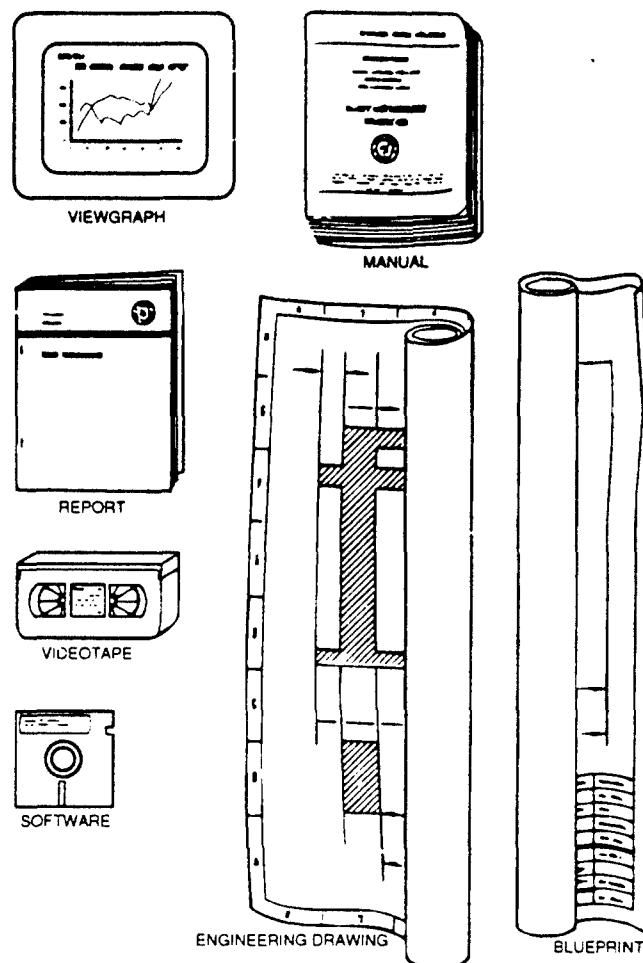


Figure 29 - Examples of Technical Data that can Disclose Export-Controlled Information

10.11 MILITARILY CRITICAL TECHNOLOGIES LIST (MCTL)

The *Militarily Critical Technologies List (MCTL)* is a detailed discussion of the development, production, and utilization technologies that DoD has determined to be crucial to U.S. military capability and of significant value to potential adversaries. The MCTL was developed in response to the mandate of the *Export Administration Act of 1979*, as amended in 1985 and 1988, to develop a list of technologies that need protection. Technical specialists from DoD, the service laboratories, other government agencies, and industry comprise the various technical working groups that develop the MCTL. The number of technologies has remained constant at 20 since 1986.

The MCTL is not intended to replace the export control lists. It is considered a reference tool that facilitates the use of the various control lists and supports development of export control policy, technology release guidelines, and specific proposals or controls. It also supports defense license reviews of items already on control lists. It is important to remember, however, that the list can be used as the authority to withhold technical data associated with defense goods.

Since the MCTL is used in conjunction with regulatory documents issued by the Department of Commerce, Department of State, Department of Energy, and COCOM, referenced control numbers or documents are cited. Proposed controls are also cited.

The MCTL is subject to continuous review and revision. It is always issued in an unclassified version, and classified supplements are published as needed. The first one was published in both unclassified and classified form in October 1984. The 1992 edition is the current one.

There are two other publications that should be mentioned. The *Defense Science and Technology Strategy* presents the new strategic plan for DoD's Science and Technology program and defines the seven new S&T "thrusts". The *DoD Key Technologies Plan* discusses the 11 technologies that support the seven S&T "thrusts".

10.12 EXPORT CONTROL DETERMINATION

The determination of export-controlled technical data is usually not obvious or easy. The *ITAR*, the *EAR*, the *U.S. Munitions List*, the CCL, and the MCTL should be used in making this determination. Other possible source materials include information from the intelligence and security communities, work in industry and academia, and technology developments by allied nations. Appendix B of MIL-STD 1806, which is discussed in Section 10.17, contains a guide to help with this determination. Figure 30 shows the steps to follow when marking an export control determination.

The following general rules apply:

1. If the data can not be used to design, produce, operate, or repair something, it is **exempt** from export control.
2. If the data has already been publicly released and is generally available, it is **exempt** from export control.
3. If the data is associated with an article listed on the *U.S. Munitions List*, it is **subject** to export control.
4. If the data is associated with a commodity that is listed on the CCL, it is **subject** to export control.

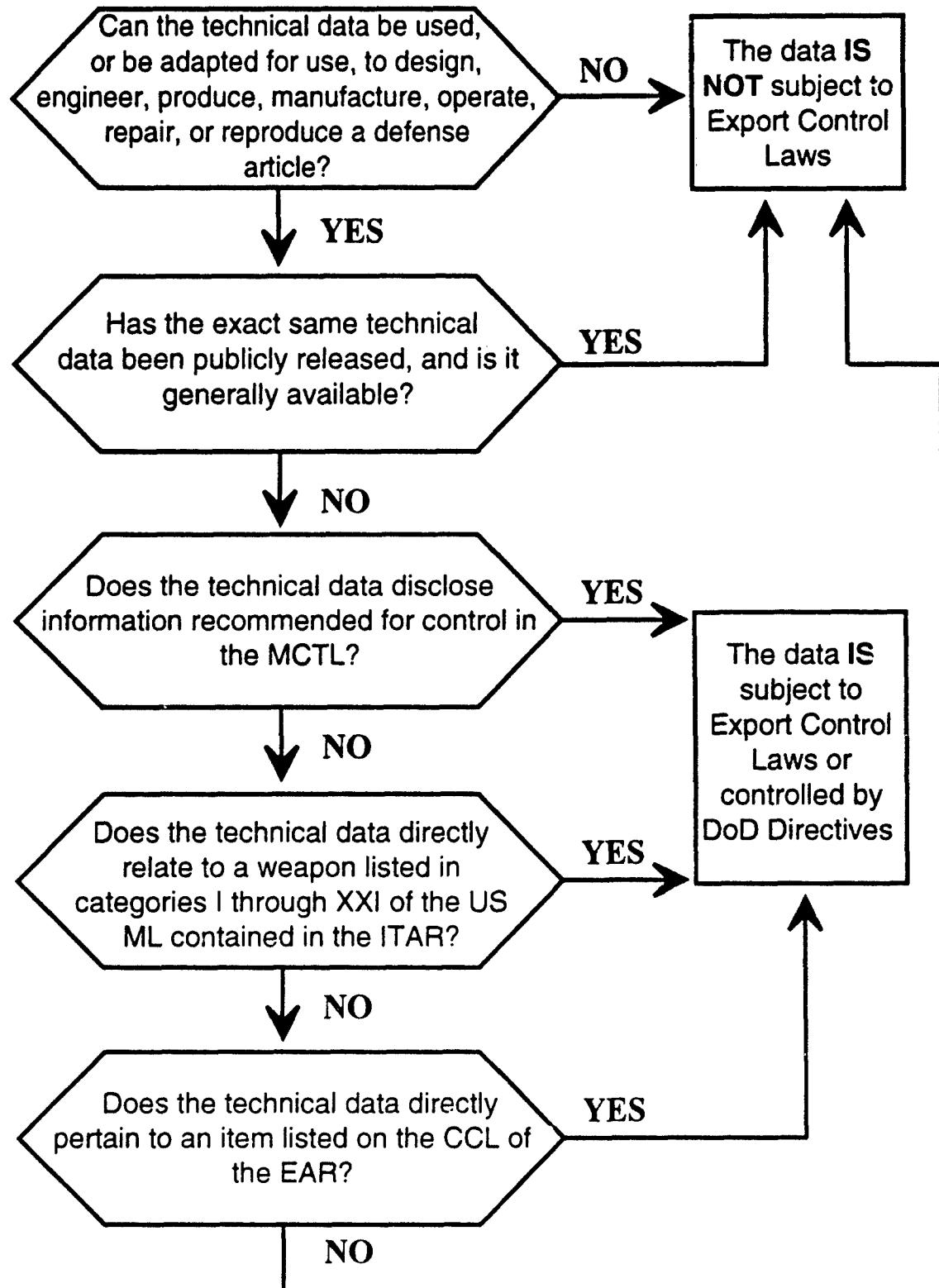


Figure 30 - Procedure for Determining if Technical Data is Export-Controlled

10.13 EXPORT CONTROL WARNING

As with a distribution statement, the export control warning also protects information during the secondary distribution process. DoD Directive 5230.24 mandates the use of the following warning notice on all documents that contain export-controlled technical data:

WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec. 2751 et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C. App. 2401 et seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

This is the statement that is cited in MIL-STD 1806, which is discussed in Section 10.17, but variations on the wording are acceptable. For example, a service-specific regulation may be quoted and dollar penalties indicated. An abbreviated warning notice may be used if there is not enough room.

All export-controlled marked data must also be marked with Distribution Statements B, C, D, E, or F (Figure 31). "Critical technology" should be cited as the reason. If the significance of the restriction needs to be emphasized, Distribution Statement E should be assigned, and "direct military support" cited as the reason. The export control warning is always used if Distribution Statement X is assigned.

Desired Audience	Distribution Statement
U.S. Government Only	B
U.S. Government and its Contractors	C
DoD and U.S. DoD Contractors	D
DoD Only	E
Controlling Agency Only	F
Individuals or Enterprises not Associated with U.S. Government	X

Figure 31 - Distribution Statements to be Used with Export-Controlled Material

10.14 DESTRUCTION NOTICE

The destruction notice is another type of marking found on documents. It was mandatory for all documents marked with Distribution Statements B, C, D, E, F, or X and read:

DESTRUCTION NOTICE - For classified documents, follow the procedures in DoD 5200.22-M, Industrial Security Manual, Section II-19 or DoD 5200.1-R, Information Security Program Regulation, Chapter IX. For unclassified, limited documents, destroy by any method that will prevent disclosure of contents or reconstruction of the document.

It is no longer required by DoD to be displayed on unclassified/limited documents and is considered optional. DoD Directive 5230.24 states the destruction methods to be followed for unclassified/limited documents. A destruction notice is required on classified documents.

AR 70-45 requires Army documents to contain destruction instructions.

10.15 RESPONSIBILITY FOR MARKING TECHNICAL DATA

The responsibility for assigning the appropriate distribution statement and determining whether the information is export-controlled belongs to the Controlling DoD Office, which is usually the organization that generated or originated the information. Contractors can be tasked with applying the controls, but they can not choose them.

It is the responsibility of the STINFO Manager to assist the originating office in this important assignment by:

- Understanding the basics of the two marking systems.
- Providing guidance to the producers of STI to help them select and apply distribution statements and to determine whether the material should be marked for export control.
- Having copies of support documentation available for review, e.g., the *U.S. Munitions List*, the CCL, the MCTL.

During processing, the STINFO Manager should check that the markings are valid, reasonable, and consistent. An example of consistency is the proper combination of markings, e.g., the export control notice can not be marked on Distribution Statement A documents.

10.16 MARKING NEWLY CREATED DATA

The main purpose of the marking systems is to control new information. There is no requirement to apply markings to older material, but organizations can choose to do so. In general, if unmarked information is requested, and it has not been placed in the public domain, it should be reviewed and marked.

10.17 PLACEMENT OF MARKINGS ON TECHNICAL DATA

The location of the markings is important and has been standardized. In general, the markings must be conspicuous.

MIL-STD 1806, *Marking Technical Data Prepared by or for the Department of Defense*, was published in 1990. The standard is a contracting tool and is included in contracts as the marking authority. The STINFO Manager will find it a very useful publication.

The standard provides procedures for the marking of unclassified/limited scientific, technical, engineering, production, and logistics data. The standard includes placement instructions for data in paper format and special categories of material, e.g., charts, maps, drawings, photographs, films, recordings, transparencies, slides, videotapes, microforms, computer printouts, etc. Illustrations are included. It also contains a guide to follow when making an export control determination.

A second edition of MIL-STD 1806 is planned for FY93. Among a number of changes, it will include updated policy, a chapter on digital data, more explanations, and editorial changes. It may be in a new format.

A copy of the standard is found in the STINFO Documentation binder of your training material.

AFP 80-30, *Marking Documents with Export-Control and Distribution- Limitation Statements*, is a pamphlet that describes the two marking systems and contains an export control guide that is similar to the one in MIL-STD 1806.

Figure 32 is an example of the proper placement of markings.

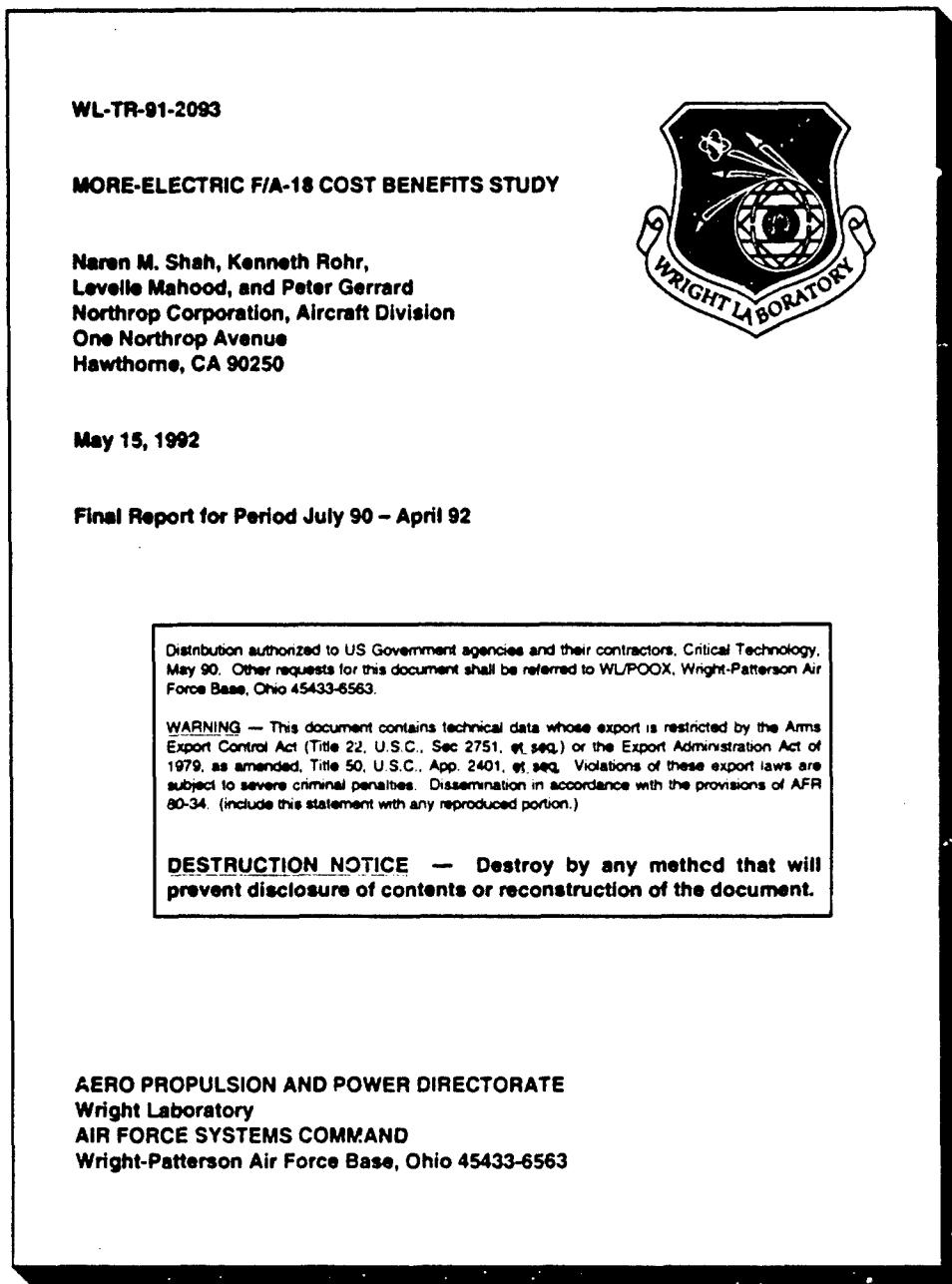


Figure 32 - Example of the Placement of Markings

10.18 CHANGES AND REMOVAL OF MARKINGS

The STINFO Manager's role in reviewing distribution statements was discussed briefly in Chapter 9. Unlike the security classification system, there is no automatic downgrading for distribution statements. Statements remain in effect until changed or removed by the Controlling DoD Office. Information with B, C, D, E, F, or X statements must be reviewed with the goal of establishing a less restrictive statement whenever conditions permit. Both AFR 83-1 and AR 70-45 state that statements should be reviewed at least annually.

In addition to any required reviews, the STINFO Manager will review statements when requests for documents are received, e.g., the DTIC Form 55, *Request for Release of Limited Document*, process.

There is one particular benefit to regular reviews. Because distribution statements have been around for at least 30 years, older documents can present a release problem. Organizations have ceased to exist, have been merged into new ones, or have been assigned new functions. The identification of the office of record can present a challenge, and the periodic review of assigned statements helps control this problem.

A change to Distribution Statement A requires approval from the Public Affairs Office. A change in classification does not automatically change any markings.

10.19 RELEASE OF TECHNICAL DATA

Release of technical data must be in compliance with the affixed markings unless specific approval from the Controlling DoD Office is granted for the release.

A distribution statement authorizes the secondary distribution of technical data to an intended audience without additional authorization. This additional authorization is usually handled by the submission of a DTIC Form 55, *Request for Release of Limited Document*, by the requester to the Controlling DoD Office. In this scenario, DTIC serves as the secondary distributor for a particular document, and the assigned statement excludes the requester. The controlling office examines the request and either authorizes or denies the release of the document. A review of the statement is also conducted at this time. Information marked with a distribution statement may be withheld from a FOIA request.

In the case of export-controlled information, contractors must be certified to receive such information. The certification system was established by DoD Directive 5230.25. The Defense Logistics Agency has overall responsibility for administering the certification system, and the Defense Logistics Services Center (DLSC), located in Battle Creek, Michigan, carries out the operational functions. It collects the certifications and maintains a database. Companies that are certified are assigned a certification number and are eligible to receive export-controlled information for a renewable period of five years. The Center also disseminates the *Certified Contractor Access List (CCAL)*, a quarterly microfiche listing. The list should be checked before the release of any export-controlled information. When data is so important that release outside DoD or a specific service may jeopardize a U.S. technological or operational advantage, the data may be withheld from certified contractors.

Certification is accomplished by completing the DD Form 2345, *Militarily Critical Technical Data Agreement*. The form is a self-certification that the applicant will use the data only in ways that will maintain the protection afforded by U.S. export control laws.

DoD 5230.25-PH gives an in-depth description of the certification process.

Appendix A of MIL-STD 1806 contains the *Notice to Accompany the Dissemination of Export-Controlled Technical Data*. This notice must accompany any export-controlled documents distributed to qualified U.S. contractors. All export-controlled documents distributed by DTIC contain the notice.

As discussed earlier in this chapter, the *Freedom of Information Act (FOIA)* was the impetus for the

resulting DoD authority to withhold from public disclosure unclassified technical data with military or space applications. FOIA requests for export-controlled information can now be denied. AFR 80-34 discusses FOIA requests and includes sample denial letters.

There can be additional restrictions placed on the release of technical data. There are special markings, e.g., intelligence, and special access program restrictions.

Copies of the two cited forms and the notice are found in the STINFO Documentation binder of your training material.

Figure 33 summarizes the markings which have been discussed in this chapter.

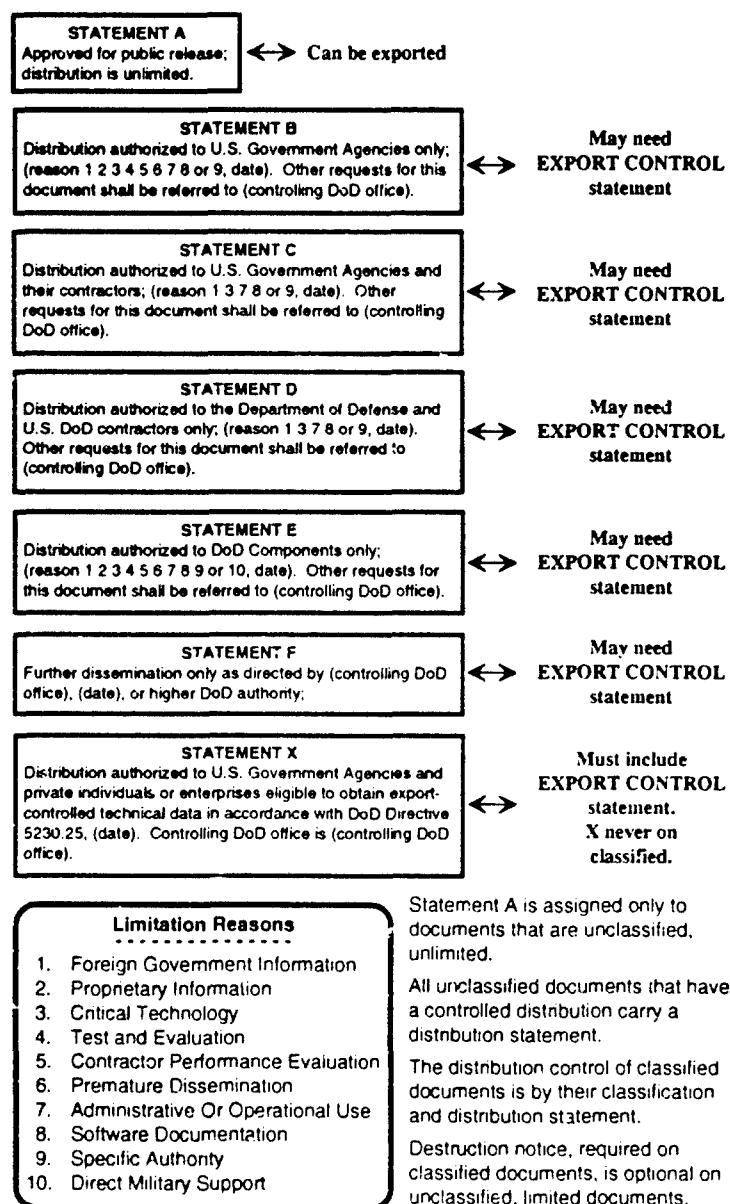


Figure 33 - DoD Limitation Statements

10.20 DOCUMENTATION

Major documents that support control and marking include:

1. AFP 80-30, *Marking Documents with Export-Control and Distribution - Limitation Statements*
2. AFP 205-13, *A Guide to Marking Classified Documents*
3. AFR 80-34, *Withholding of Unclassified Technical Data from Public Disclosure*
4. AFR 83-1, *U.S. Air Force Scientific and Technical Information Program*
5. AFR 83-2, *United States Air Force Technical Publications Program*
6. AFR 83-3, *Marking Technical Documents*
7. AR 70-45, *Research, Development, and Acquisition Scientific and Technical Information Program (Draft)*
8. Blados, Walter R.; Maiorana, Charlie; Kuhn, Allan D. *Document Marking*. Washington, D.C.: Deputy Director for Scientific and Technical Information, Assistant Secretary of the Air Force (SAF/AQT); April, 1990.
 - USAF STINFO Management 90/4, SAF/AQT-SR-90-004, AD-A231 150
 - USAF STINFO Management 90/4-Video, SAF/AQT-Video-90-003, AD-M000 017
 - USAF STINFO Management 90/4-Floppy, SAF/AQT-Floppy-90-005, AD-M000 088
9. *Commodity Control List (CCL)* (15 CFR Part 799.1)
10. DD Form 2345, *Militarily Critical Technical Data Agreement*
11. *Defense Science and Technology Strategy* (AD-A253 691)
12. *Department of Defense Authorization Act of 1984*, Public Law 98-94. U.S. Code, Title 10
13. DoD Directive 5200.1, *DoD Information Security Program*
14. DoD 5200.1-PH, *A Guide to Marking Classified Documents*
15. DoD 5200.1-R, *Information Security Program Regulation*
16. DoD Directive 5220.22, *DoD Industrial Security Program*
17. DoD 5220.22-M, *Industrial Security Manual for Safeguarding Classified Information*
18. DoD 5220.22-R, *Industrial Security Regulation*
19. DoD Directive 5230.9, *Clearance of DoD Information for Public Release*
20. DoD Directive 5230.24, *Distribution Statements on Technical Documents*
21. DoD Directive 5230.25, *Withholding of Unclassified Technical Data from Public Disclosure*
22. DoD 5230.25-PH, *Control of Unclassified Technical Data with Military or Space Application*
23. *DoD Key Technologies Plan* (AD-A253 692)
24. DTIC Form 55, *Request for Release of Limited Document*
25. *Export Administration Regulations (EAR)* (15 CFR 768-799)
26. *International Traffic in Arms Regulations (ITAR)* (22 CFR 120-130)
27. Military Standard 1806, *Marking Technical Data Prepared by or for the Department of Defense*
28. *Militarily Critical Technologies List* (AD-A221 602)
29. *Notice to Accompany the Dissemination of Export-Controlled Technical Data*
30. OPNAVINST 5510.161, *Withholding of Unclassified Technical Data from Public Disclosure*
31. *U.S. Munitions List* (22 CFR Part 121)

11. USER SUPPORT

KEY POINTS

- The STINFO Manager should establish procedures to obtain and provide user support services for the organization.
- To accomplish this, the STINFO Manager should be knowledgeable about the:
 - Technical activities at the organization.
 - Perceived information needs of the scientists, engineers, and others in the user community.
 - Services that are currently provided.
 - Services that could be provided.
- Once potential sources are identified, the STINFO Manager should inform the appropriate users of these services. If access is desired, the STINFO Manager should assist the users to obtain the services.
- The single most important external user support service is the Defense Technical Information Center (DTIC).
- Other possible user support services are:
 - Access to foreign technology.
 - Access to commercial databases.
 - Access to the Government-Industry Data Exchange Program (GIDEP).
 - Access to Independent Research & Development (IR&D) project descriptions.
 - Support of sponsored technical meetings.
- The major source of information in the organization is the technical library. The STINFO Manager should work with the library to provide services to the organization because the library is in the best position to know of new information products, databases, or services. The role of the technical library is discussed in Chapter 16.
- The STINFO Manager should provide continuous training in and promotion of the available user support services.

Most of the STINFO Manager's responsibilities revolve around controlling and disseminating information that flows OUT of the organization. The manager is also concerned with obtaining and providing information support services for the organization. This can range from establishing a DTIC account to supporting technical meeting coordinators.

Determining the organization's needs is not always easy. Most providers of information are always seeking to identify the needs of their user community. At the same time, most potential users in any type of organization or community are not aware of the range of information services that are available to them.

Before implementing any support services, the STINFO Manager needs to know: a) what the users feel they need, b) how these needs are being currently met, and c) what information services are available to support the user population.

The next two chapters discuss some of these user support services. They are considered fundamental, particularly DTIC. The other ones are dependent upon the particular needs of the organization. Keep in mind that this is only the start of your list of possible user support services.

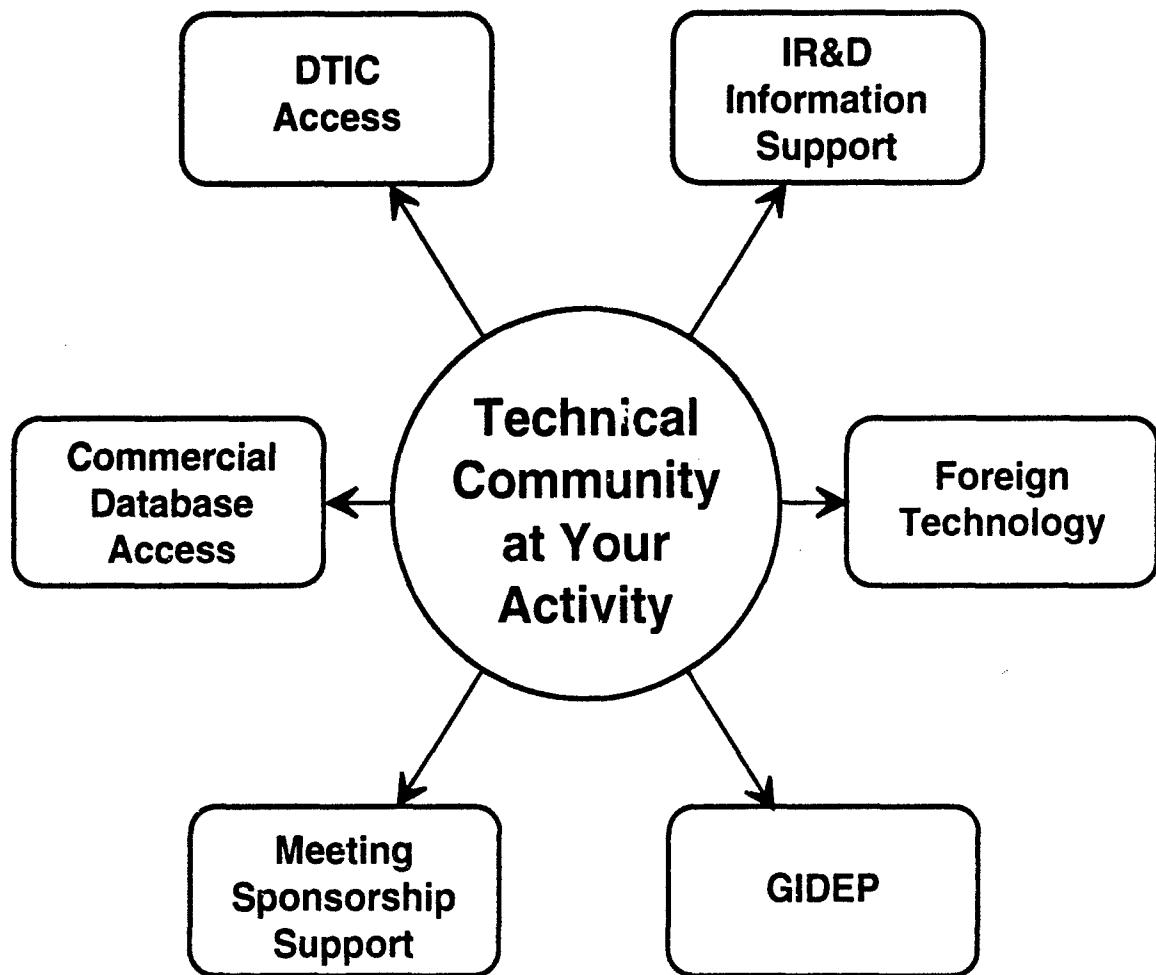


Figure 34 - Some Potential User Support Services

12. USER SUPPORT - DEFENSE TECHNICAL INFORMATION CENTER (DTIC)

Defense Technical Information Center
Building 5, Cameron Station
Alexandria, VA 22304-6145

User Services: (800) 225-DTIC (3842), (703) 274-3848 or DSN 284-3848

KEY POINTS

- DTIC is a principal element of the DoD STIP and should be supported and used.
- DTIC is the central source for the results of DoD RDT&E efforts.
- The STINFO Manager should be the Office of Primary Responsibility (OPR) for DTIC. For example, AFR 83-1 states that the STINFO Manager serves as the OPR for interfacing with DTIC.
- The STINFO Manager should ensure that:
 - The products and services of DTIC are supported and used.
 - Literature searches of the DTIC databases - WUIS, TR, and IR&D - are conducted before initiating a new work effort or before making significant changes to a work effort.
 - DTIC serves as the secondary distributor for all appropriate documents produced by the organization.
 - Two copies of each appropriate technical document are submitted to DTIC.
 - All unclassified, unlimited documents to be sent to NTIS (and the general public) are distributed through DTIC.

12.1 WHAT IS DTIC?

DTIC is the focal point within DoD responsible for collecting, storing, retrieving, and disseminating information resulting from, or relevant to, DoD research, development, test, evaluation, analysis, studies, and acquisition management activities. DTIC's governing regulation is DoD Directive 3200.12, *DoD Scientific and Technical Information Program*.

DTIC is now under the control of the Office of the Under Secretary of Defense (Acquisition) and reports to the Director of Acquisition Policy & Program Integration (AP&PI). The ultimate purpose of this transfer is to assist research, development, and acquisition activities in using the defense technology base more easily and effectively.

DTIC is the single most important information service for defense managers, scientists, and engineers.

DTIC's main facility is located at Cameron Station, Alexandria, VA. There are three regional offices: a) Kirtland AFB, Albuquerque, NM; b) Hanscom AFB outside Boston, MA; and c) El Segundo, CA, near Los Angeles. These offices offer many of the same services provided at Cameron Station. DTIC's Manpower and Training Research Information System (MATRIS) Office is located in San Diego, CA. MATRIS provides access to a specialized database and serves a range of DoD users.

DTIC is organized into a number of directorates. The most important of these, from a user's perspective, are the Directorate of User Services, which handles registration for DTIC services and all user support and liaison functions, and the Directorate of Operations, which handles such functions as document acquisition, processing, and maintenance of the various DTIC databases.

DTIC has two advisory groups. The first is the elected 11-member Users Council, and the other is the STI/Strategy Group. They both serve as liaison between DTIC and its user community, advising on the resolution of problems and recommending improvements to DTIC products and services.

The following multimedia documents present overviews of DTIC:

1. Blados, Walter R.; Maiorana, Charlie; Kuhn, Allen D. *Interacting with DTIC*. Washington, DC: Secretary of the Air Force, Deputy for Scientific and Technical Information (SAF/AQT); July 1990.
 - USAF STINFO Management 90/6, SAF/AQT-SR-90-0013, AD-A232 485
 - USAF STINFO Management 90/6-Video, SAF/AQT-Video-90-004, AD-M000 019
 - USAF STINFO Management 90/6-Floppy, SAF/AQT-Floppy-90-005, AD-M000 087
2. *DTIC: The Source for Defense Information*. VHS Video, Length: 7:45, Complimentary. Available from DTIC-BCP, (703) 274-6434 or DSN 284-6434.

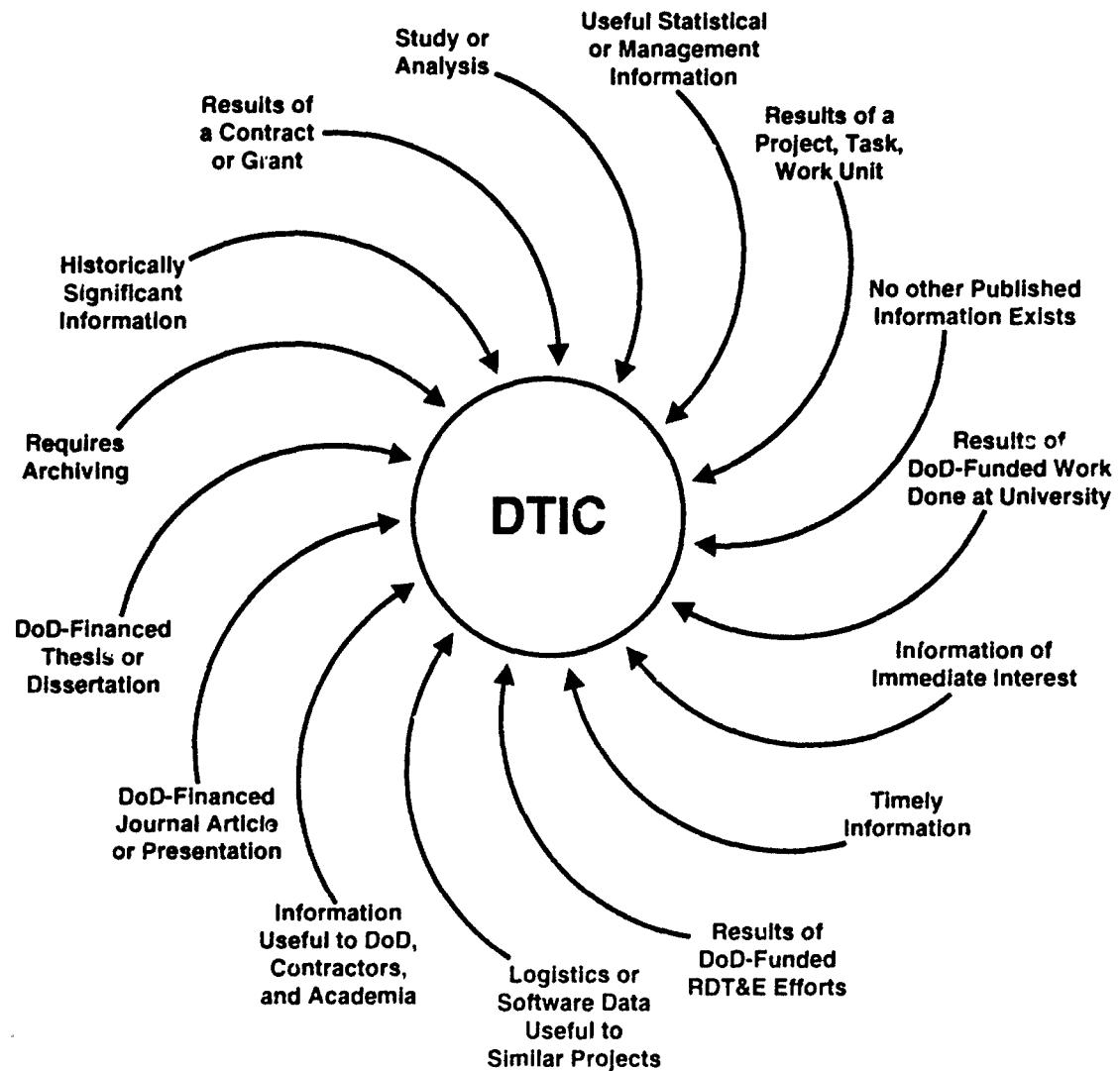


Figure 35 - Types of Information that Must be sent to DTIC

12.2 DTIC FUNDAMENTALS

The DTIC collection is the major source of scientific and technical information, including the results of DoD RDT&E efforts, for the DoD community. DTIC has an active collection development program that includes a broad range of publications, such as technical reports, technical memoranda and notes, conference papers and proceedings, dissertations and theses, journal articles, patent applications and patents, and studies and analyses. DTIC will be collecting other types of information because of its new mission to support all the DoD Acquisition Program, including senior level managers.

Holdings do not include TOP SECRET, Communications Intelligence (COMINT), Electronic Intelligence (ELINT), or Communications Security (COMSEC) information. DoD Directive 3200.12 also excludes from the DTIC collection information relating to command and control of operations and operational forces; scientific and technical intelligence production community products; and the DoD technical data management program.

Primary contributors to DTIC are DoD organizations and those under contract and grant to DoD. Contributions are also received from other U.S. Government agencies, their contractors and grantees, and foreign governments.

DTIC services are available to DoD, other U.S. Government agencies, and U.S. Government contractors and grantees. Organizations may also become eligible for service by participation in any of four special programs. These are the Potential Defense Contractors Program (PCP), the Historically Black Colleges and Universities (HBCU) Program, the DoD University Research Support (URS) Program, and the Small Business Innovation Research (SBIR) Program.

Organizations must register to use DTIC services. This central registry file of users authorized access to defense scientific and technical information is maintained at DTIC. All requests for DTIC products and services are validated against this registry. The registration process consists of:

1. DD Form 1540, *Registration for Scientific and Technical Information Services*. This is the only form required for registration by DoD and other U.S. Government agencies and must be submitted annually. For contractors, the form allows access to unclassified/unlimited services. A separate form must be completed for each contract or grant, and the registration is in force for the length of the contract.
2. DD FORM 1541, *Facility Clearance Register*, is required for access to classified services by contractors. It is approved by the Defense Investigative Service.
3. DD Form 2345, *Militarily Critical Technical Data Agreement*, is required for access to classified and unclassified/limited technical data (including DROLS) by contractors. The form is processed by the Defense Logistics Services Center.

Charges are imposed for most of DTIC's products and services. Charges for products and services, which were previously provided at no charge and increases in established charges, were implemented in FY93. This is necessary because DTIC must now recover all of its costs.

The National Technical Information Service (NTIS) acts as the billing agent for DTIC, and billing is usually done through the NTIS deposit account.

12.3 DTIC'S HOLDINGS

DTIC's holdings consist of the technical report collection, three major databases, and special document collections.

The **Technical Report collection** consists of about 1.7 million documents, and about 30,000 new items are added annually. Items added to the collection since 1965 are archived in microfiche format. Much of the pre-1965 collection is stored in either 16mm film or microfilm, which will be eventually converted to microfiche. Two additional collections that must be searched manually are the Air Technical Index (ATI) and the Technical Information Pilot (TIP). These documents are from the 1940's through early 1950's and include captured German and Japanese documents, as well as U.S. documents.

The **Technical Report (TR) Bibliographic Database** is the largest of DTIC's databases. It currently contains citations to approximately 1.5 million items in the technical report collection. The citations in

this database correspond to the information contained on the SF 298, *Report Documentation Page*, its DoD predecessor, DD Form 1473, or DTIC Forms 503, 504, and 505, the nonprint documentation pages.

DTIC's newest product is the **Technical Report Database on CD-ROM**. The two-disk set, which is updated quarterly, contains citations to technical documents entered into DTIC's collection since January 1970. Customized search software makes searching and retrieving easy. The product contains no classified data.

The **R&T Work Unit Information System (WUIS) Database** contains management information about ongoing and completed R&T work efforts. The file contains over 200,000 records, of which about 27,000 are "active" and the rest are for completed and terminated efforts. The information in this database corresponds to the information contained on the WUIS Worksheet or its predecessor, DD Form 1498, *Research and Technology Work Unit Summary*.

The **Independent Research and Development (IR&D) Database** is the third of the major databases and contains descriptions of technical programs that are initiated and performed by DoD contractors and not wholly funded by DoD. The file contains more than 124,000 records, of which about 7,500 new records are added each fiscal year. This database contains proprietary information and is only available to DoD activities and authorized federal agency R&D personnel. The database was redesigned in FY92, and it now contains more information on the IR&D program of each company. This includes the information contained on the DTIC Form 271, *Independent Research and Development Data Sheet*, an overview of the company and its IR&D program, and detailed project descriptions.

The **Manpower and Training Research Information System (MATRIS) Database** is a small, specialized database. It was specifically developed to support the technical information needs of the manpower, personnel, and training community. It includes management information on planned, ongoing, and completed DoD research in the areas of manpower and personnel, human factors, training, etc.

12.4 DTIC'S ONLINE SERVICES

DTIC's online system is called the **Defense RDT&E Online System (DROLS)**. It links remote terminals across the U.S. and a few sites overseas to the central computer at Cameron Station. Through DROLS, users can search the major DTIC databases, i.e., TR, WUIS, and IR&D, and order documents, bibliographies, and management reports. DROLS searching is usually a function of technical libraries.

Access to DROLS is available through dedicated lines or dial-up capability. DTIC offers classified access through dedicated lines and the Secure Telephone Unit (STU III) for dial-up users.

Searching the databases available on DROLS is complex. To use the system effectively, users should receive training.

The **Department of Defense Gateway Information System (DGIS)**, one of DTIC's newest online services, offers convenient access to DROLS, other major U.S. Government databases, and commercial databases. In addition to gateway access to these databases, DGIS also offers electronic mail, downloading of search results, and post-processing features such as merging, editing, and sorting. A common command language is available.

SearchMAESTRO (Menu Aided Easy Searching through Relevant Options), another new online service, is a menu-driven search tool designed for end-users. It allows access to a large number of databases, including DROLS, and users do not need to know the command language for each one. SearchMAESTRO is available either through direct dial-up or through DGIS. A common command language is available.

Like DROLS, the **MATRIS database** can be accessed in a variety of ways. Users may request that the MATRIS staff search the database for them, and requests may be made by phone, FAX, or letter. The user may also request online access. Searching is very user-friendly since the database is menu-driven, and all menus and screens contain help capabilities. If one is interested in online access, MATRIS should be contacted for more information.

12.4 DTIC PUBLICATIONS

1. *Contributor's Handbook* is a companion to the *Handbook for Users* and describes how to submit documents, work unit summaries, and other items to DTIC. [DTICH 4185.2]
2. *DGIS Users' Guide* is an extensive introduction and reference to DGIS and covers all major features.
3. *Directory of Design Support Methods* was developed by DoD, NASA, and industry members of the DoD Human Factors Engineering Technical Group and was produced by the MATRIS Office. It contains descriptions of tools and techniques that have been developed to analyze and assess Human Systems Integration (HSI) concerns. (AD-A229 180)
4. *Directory of DoD-Sponsored R&D Databases* is a central reference guide to DoD information sources and databases - "a database of all R&D databases". It is limited to U.S. Government agencies and their contractors. The information will be available online in the future. (AD-B116 400).
5. *Directory of Organizational Technical Report Acronym Codes (DOTRAC)* is a guide to acronyms used in the report numbers assigned by organizations who submit documents to DTIC. [AD-A237 000]
6. *Directory of the DoD Information Analysis Centers* is a booklet that provides profiles of each of the 23 IACs supported by DoD, as well as useful information on costs, products, and services. It is updated regularly.
7. *DROLS Retrieval Reference Guide* is a pocket-sized guide to DROLS commands and fields. (DTICM 4185.21)
8. *DROLS Handbook* is the text for the DROLS training classes.
9. *DROLS Workbook*, dated Jan 93, is a handy publication full of practical exercises and problem sets to assist users who are learning DROLS. (AD-A259 033)
10. *DTIC Cataloging Guidelines* is the cataloging manual used at DTIC and is based on CENDI cataloging rules, which were developed by several Federal agencies, i.e., NASA, NTIS, and DOE, as well as DTIC. It is usually updated annually. (AD-A246 500)
11. *DTIC Digest* is a quarterly newsletter that has feature articles on DTIC's special programs, developments of interest to the user community, searching hints, calendar of events, etc.
12. *DTIC Referral Database Directory* contains specialized STI sources operated or supported by DoD and other U.S. Government agencies. The information will be available online in the future. (AD-A241 750)

13. *DTIC Research and Development Project Summaries* is published annually and provides brief descriptions of the current projects within the Directorate of Information Science and Technology.
14. *DTIC Telephone Index* is updated annually.
15. *DTIC Thesaurus* is DTIC's vocabulary for indexing and retrieving information in the DTIC databases. It is a very important tool to use when searching the DROLS databases, assigning subject terms, etc. It is available in paper and on diskette. Both 3 1/2 and 5 1/4 diskette versions are available. (paper - AD-A226 000, diskettes - AD-M000 125 through AD-M000 129)
16. The *DTIC Users Exchange*, The DUC Letter, is a newsletter issued irregularly by the DTIC Users Council.
17. *Handbook for Users* is the basic overall guide to DTIC and its products and services. (DTICH 4185.1)
18. *How To Get It - A Guide to Defense-Related Information Resources* is probably the most popular DTIC publication. It identifies sources of government information of interest to the defense community. The cited documents are frequently available only from the responsible office. (AD-A256 150)
19. *Introduction to DROLS Database Searching* is an interactive computer-assisted instructional program that serves as an overview for new or prospective DROLS users. It is on a 5 1/4" diskette, uses MS/DOS operating software, and is available for both monochrome and color monitors.
20. *Introduction to the Department of Defense Gateway Information System (DGIS)* is an interactive computer-assisted instructional program that provides an overview of the main features and capabilities of DGIS. It is available in both 3 1/2 and 5 1/4 diskette versions, uses MS/DOS operating software, and can be used on both monochrome and color monitors.
21. *Keeping You Informed* is a timely flyer informing DTIC users of new products, etc.
22. *MATRIS Research Directory for Manpower, Personnel, Training, and Human Factors* lists individuals who perform or manage current people-related Training and Personnel Systems Technology (TPST) R&D for the DoD. It is updated annually. (AD-A239 694)
23. *MATRIS Training and Personnel Systems Technology (TPST) R&D Program Description* is a comprehensive summary of the Manpower, Personnel, and Training Program. It is updated annually. (AD-A238 534)
24. *Notices of Changes in Classification, Distribution, and Availability* is a quarterly publication listing classification, distribution, and availability changes. It is available only on microfiche.
25. *R&T Work Unit Information System Users Manual* contains information about the WUIS and the different reports that can be ordered. Examples are included. (DLAM 4185.4)
26. *Source Header List* is a two volume set that lists the corporate authors used in the DROLS databases. Each source name is assigned a code. This a companion publication to the *Source Hierarchy List*. (AD-A256 000, AD-A256 001)
27. *Source Hierarchy List* is a three volume set that lists the corporate authors used in the DROLS databases in a hierarchical arrangement. (AD-A256 100, AD-A256 101, AD-A256 102)
28. *Subject Categorization Guide for Defense Science and Technology* is a detailed listing of the subject categories used to identify the major subject areas of a document and to establish contractor need-to-know on the DD Form 1540. [AD-A172 650]

29. *Subject Term Frequency Counts for DoD Information Analysis Centers* is a listing of subject terms and frequency counts for the IAC documents in the TR database. It is an important reference tool to use when searching for subjects related to IACs. [DTIC-H 4185.9]
30. *User's Guide for SearchMAESTRO* gives an overview of the system and its major features.

12.5 FORMS USED BY DTIC

1. DD Form 1540, *Registration for Scientific and Technical Information Services*, is used to register for DTIC products and services.
2. DD Form 1541, *Facility Clearance Register*, is used by contractors requiring classified services from DTIC. It must be approved by the Defense Investigative Service.
3. DD Form 2345, *Militarily Critical Technical Data Agreement*, is used by contractors to obtain access to classified and unclassified/limited technical data (including DROLS). The form is processed by the Defense Logistics Services Center.
4. DTIC Form 1, *Document Request Form*, is used to order reports from the DTIC collection.
5. DTIC Form 6 - *Notification of Deposit Account*, is used to register NTIS deposit account numbers with DTIC. This number must be on file with DTIC before any order can be processed.
6. DTIC Form 50, *DTIC Accession Notice*, is used by a contributor who wants to know the accession number (AD) that has been assigned to the document submitted to DTIC. The form is returned by DTIC to the contributor when the AD has been assigned to the document.
7. DTIC Form 55, *Request for Release of Limited Document*, is used to request access to a limited document when the requester does not meet the requirements of the distribution statement.
8. DTIC Form 64, *Request for DTIC Database Products*, is used to request a search of a DTIC database or to subscribe to the Current Awareness Bibliography or Recurring Reports services.
9. DTIC Form Letter 88, *Request for Scientific and Technical Report*, is used by DTIC to request technical publications that are not in the DTIC collection.
10. DTIC Form 256, *Forms Request*, is used to order quantities of the standard DTIC forms.
11. DTIC Form 271, *Independent Research and Development Data Sheet*, is used by contractors to submit data to DTIC for inclusion in the IR&D database. It is still used to submit data for inclusion in the redesigned database. The form should be considered an input worksheet and not an official form.
12. DTIC Form 503, *Videorecording Report Documentation Page*, is used to submit recordings on which visual images have been registered.
13. DTIC Form 504, *Computer Diskette Documentation Page*, is used to submit documents, software, data files, and databases on computer diskette or CD-ROM.
14. DTIC Form 505, *Magnetic Tape Documentation Page*, is used to submit documents, software, data files, and databases on magnetic tape.
15. SF 298, *Report Documentation Page*, should be included with all paper and microfiche documents submitted to DTIC. This form is not available from DTIC and must be ordered from GSA.
16. *Work Unit Information System (WUIS) Worksheet* is used to submit information to the WUIS. It replaced DD Form 1498, *Research and Technology Work Unit Summary*. The form should be considered an input worksheet and not an official form.

All cited forms are found in the STINFO Documentation binder of your training material.

12.6 INTERACTING WITH DTIC

Interactions with DTIC occur in a number of ways. The following are some of the ways.

Automatic Document Distribution (ADD) Program. Under the ADD program, DTIC users establish subject profiles and receive microfiche copies twice a month of newly acquired documents that match those interests.

Automatic Magnetic Tape Distribution (AMTD) Program. The AMTD program allows DTIC users to receive magnetic tapes updates on a semi-monthly basis from the TR database.

Conferences. The DTIC Annual Users Training Conference is a major event for individuals involved with defense information. It is held in the Washington, D.C. area in the fall of each year. It gives the DTIC user community the opportunity to learn about new developments and services and to share information with the DTIC staff. The conference is four days long and is frequently preceded or followed by hands-on DROLS training classes.

DTIC also sponsors a series of regional conferences each year in various locations across the United States. DTIC users may want to attend these regional conferences if they are unable to attend the annual one.

Current Awareness Bibliography (CAB) Program. CAB provides DTIC users with customized bibliographies based on their subject needs. The user's profile is matched against newly accessioned documents in the TR database twice a month. A print bibliography containing unclassified citations is sent to the user.

Demand Bibliographies. DTIC users can request that a literature search on a particular subject be conducted on DROLS. This results in a bibliography. The response time is approximately ten days.

FAX. DTIC now accepts document orders, requests for services, and a number of forms by FAX.

Obtaining Forms. DTIC Form 256 should be completed and submitted to DTIC. Orders for forms may also be placed by telephone.

Ordering Documents. DTIC provides documents from its collection on a demand basis in print, microfiche, and nonprint formats. They are distributed according to the security level, need-to-know, and assigned distribution limitation of each document. They may be ordered through DROLS or by DTIC Form 1, telephone, letter, FAX, or E-Mail. DTIC offers priority, express, and regular mail service.

Recurring Reports Program. A similar customized bibliography can be produced from the WUIS and IR&D databases. A recurring print report can be produced on a monthly, quarterly, semiannual, or annual basis. Users receive these reports according to their eligibility to access the two management databases.

Registration. See Section 12.2

Shared Bibliographic Input Network. Under SBIN, libraries and information centers can input bibliographic records for documents into the TR database through remote terminals. This is known as shared cataloging. As a result, SBIN participants can create an online catalog of their holdings. SBIN will be replaced by PCTR Input in the future.

Submissions. When submitting a print or microfiche document for inclusion in the Technical Report collection and database, two legible copies should be sent as part of primary distribution. The document should have been prepared according to the ANSI standards or local requirements. The submission should include a completed SF 298 and DTIC Form 50. Classified reports must be wrapped and sent in accordance with DoD 5200.1-R, *Information Security Program Regulation*. DTIC now accepts nonprint products in the following formats: computer diskette, magnetic tape, or video recording. CD-ROM is accepted for announcement only. The same submission requirements apply to nonprint products, but the DTIC nonprint report documentation pages should be used.

Submissions to the WUIS must be in machine-readable format, i.e., diskette or magnetic tape, and formatted according to the requirements in DoD 3200.12-M-1, *WUIS Input Manual (Draft)*. This requirement is automatically met if you are using the PC-WUIS, DAWSON I, or WInS software programs to manage and input your WUIS submissions.

Submissions to the IR&D database must be in machine-readable format, i.e., diskette or magnetic tape, and formatted according to the requirements in DLAM 4185.9, *Independent Research and Development Database Input Manual (Draft)*. These submissions are made by contractors on an annual basis coinciding with the submission of their annual IR&D project descriptions.

Training. DTIC conducts a number of DROLS training classes. These classes are held on-site at DTIC, at the annual and regional users conferences, and off-site. There are basic, advanced, and refresher courses given for dedicated and dial-up DROLS users. Training is also provided for DGIS and SearchMAESTRO.

12.7 SPECIAL PROGRAMS

The university research programs of the Office of the Secretary of Defense (OSD) are supported under DTIC's **University Research Support (URS)** program. The **University Research Initiative (URI)** is a basic DoD research program intended to strengthen the capabilities of universities to perform research in areas critical to the national defense. DTIC provides, at no cost, technical information services to URI participants.

The **Historically Black Colleges And Universities (HBCU)** Program provides, at no cost, technical information and assistance to schools designated Historically Black or minority institutions. The purpose of this program is to enhance these schools' chances for winning DoD contracts.

The **Potential Defense Contractor Program (PCP)** provides support to those organizations or individuals that do not have current contracts or grants with DoD. Participation is available through one of the military services or the Defense Advanced Research Projects Office (DARPA). Once registered, the organization or individual can obtain access to DTIC products and services.

Under the **Small Business Innovation Research (SBIR)** Program, U.S. Government agencies spending more than 100 million dollars for R&D must set aside money for innovative R&D within the small business community. DTIC supports the program by supplying background Technical Information Packages (TIPs) to the potential bidders on solicitation topics. These TIPs contain bibliographies of unclassified/unlimited reports and work unit summaries, as well as other information sources supplied by the authors of the individual solicitation topics. TIPs are supplied at no cost. DTIC also supplies the first 10 documents ordered from the TR collection at no cost.

12.8 SPECIALIZED DATA CENTERS

DTIC acts as the administrator for 14 DoD-sponsored **Information Analysis Centers**, commonly known as IACs. These IACs are centers for the analysis of scientific and technical data in specialized subject areas. Although the services of the IACs are available to the general public, registration with DTIC establishes eligibility for classified and limited information from the centers. DTIC users are encouraged to make direct contact with the appropriate IACs. Although the IACs distribute information directly, most of them use the TR database for bibliographic access to their holdings. By using DROLS, you can identify IAC-published documents, as well as holdings of their various collections.

DTIC manages the **Manpower And Training Research Information System (MATRIS)** Office in San Diego, CA. MATRIS collects, stores, updates, retrieves, and disseminates information on Training and Personnel Systems Technology (TPST) research within DoD. Research areas include manpower and personnel, education and training, simulation and training devices, and human factors engineering. MATRIS can provide such information as Program Element and Project descriptions, Congressional Category identification, and DoD Budget Category breakdowns. This is in addition to the specific subject area information typically contained in work unit or studies and analysis records. MATRIS services are available to DTIC registered users only.

13. USER SUPPORT - OTHER SERVICES

The following user support services are discussed in this chapter:

- *Commercial Databases*
- *Foreign Technology*
- *Government-Industry Data Exchange Program (GIDEP)*
- *Independent Research and Development (IR&D) Program*
- *Technical Meetings*

13.1 COMMERCIAL DATABASES

One of the most important information sources available to DoD scientific and technical personnel is access to thousands of online commercial databases. These databases, which are available to anyone with a modem and the ability to pay for the service, cover the S&T literature from A to Z. While the bulk of these databases are bibliographic, there are any number of full text and numeric files available.

The database phenomenon has had a growth curve that almost rivals the personal computer. In 1980, the worldwide *Directory of Online Databases* listed 400 databases, 221 different database producers, and 59 different online services. The 1992 edition lists more than 5000 databases, more than 2200 database producers, and nearly 750 online services.

The STINFO Manager should:

1. Be aware of the S&T and military databases that relate to the activity's RDT&E efforts.
2. Know the database access procedures at the activity.
3. Work with the technical library to obtain access to databases.
4. Set up procedures to ensure that these services are promoted and used.

13.2 FOREIGN TECHNOLOGY

Access to foreign technology is important to the RDT&E efforts of the scientists, engineers, and managers at your organization and, ultimately, contributes to U.S. economic growth. Technology transfer, another contributor to U.S. economic development and industrial competitiveness, is discussed in Chapter 15.

There are a number of DoD initiatives in this area. For example, in 1991, the *U.S. Army International Scientific and Technical Information (ISTI) Steering Group* was formed with the following goals:

1. To provide and expedite efficient and cost effective access to international STI for all appropriate users.
2. To keep our hand on the pulse of developments in the arena of international STI.
3. To gain knowledge of all applicable international databases and their utility to the Tech Base community.

4. To resolve problems relating to access of these databases.
5. To facilitate interagency interface concerning advances in access to international STI.

In support of these goals, the Army has a number of international cooperative programs in place. For example, the Army Missile Command is working with the Japanese.

The STINFO Manager plays an important role in providing access to foreign technology. AFR 83-1 states that the STINFO program should work closely with foreign technology specialists. In practice, this means providing access to foreign STI that is available, usually through databases. You will be working mainly with your technical library to obtain this access. In addition, the STINFO Manager will be working with foreign personnel in the international cooperative programs.

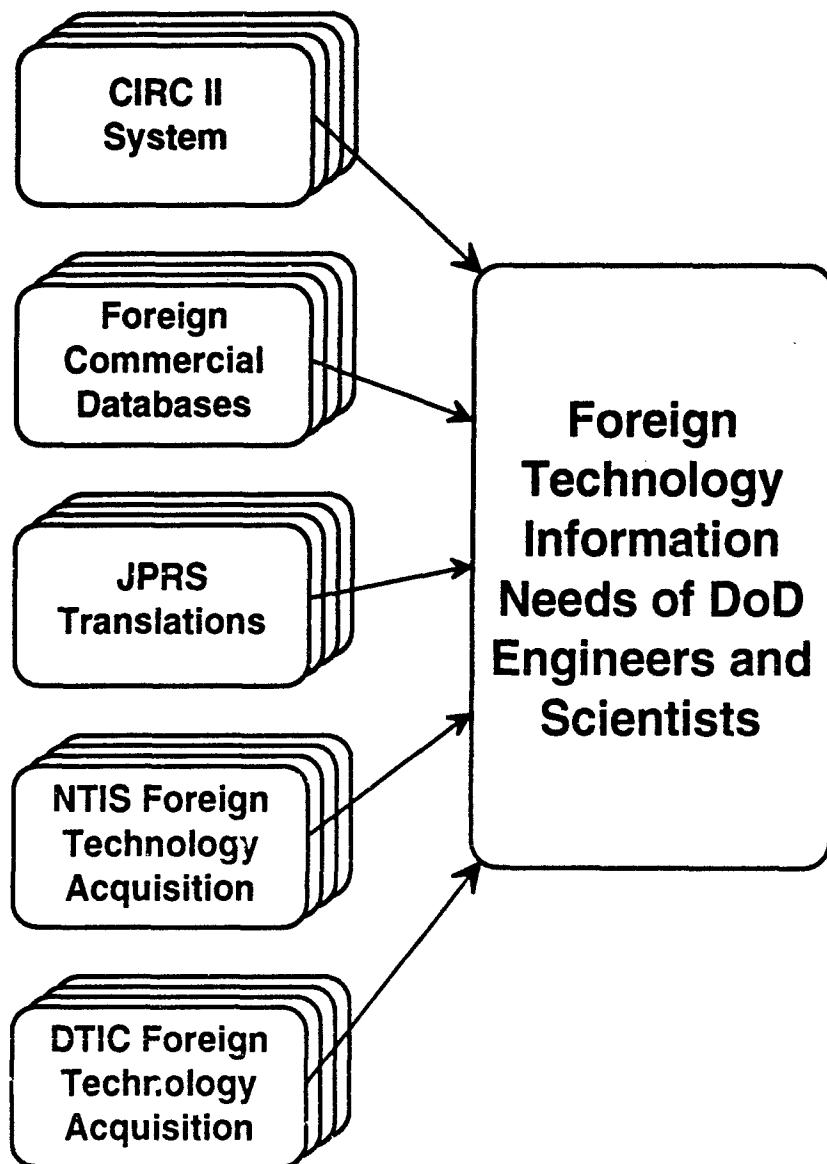


Figure 36 - Foreign Technology Information

Let's touch briefly on the following five services:

1. *Central Information Reference and Control (CIRC II) System.*
2. *DTIC Foreign Technology Acquisition.*
3. *Foreign commercial databases.*
4. *Joint Publications Research Service (JPRS).*
5. *NTIS Foreign Technology Acquisition.*

13.2.1 CENTRAL INFORMATION REFERENCE AND CONTROL (CIRC II) SYSTEM

The Central Information Reference and Control (CIRC II) system is responsible for processing, storing, retrieving, and disseminating foreign scientific and technical intelligence information. It is managed by the AF Foreign Aerospace Science and Technology Center as part of the Scientific and Technical Intelligence Information Service Program (STIISP) of the Defense Intelligence Agency (DIA). The address is:

CIRC II Monitor
Attn: FASTC/SCC
Wright Patterson AFB, OH 45433-6508
(513) 257-2533, DSN 787-2533

The CIRC II system has two functions. First, it supports the missions of five service intelligence agencies: Air Force Foreign Aerospace Science and Technology Center, Army Foreign Science and Technology Center, Army Missile Space Intelligence Agency, Armed Forces Medical Intelligence Center, and the Naval Maritime Intelligence Center. These five agencies provide translation services for the military. Second, CIRC II supports all U.S. Government R&D agencies.

The CIRC II database is quite large, containing citations to approximately 9.1 million STI documents in the main database and approximately 7 million citations in the support databases. The STI database contains documents with a variety of classifications. The support databases are cross reference files. For example, the translation database indicates the amount of translation performed on a document. A microfiche collection of the documents is maintained at the center.

There are a number of CIRC II offices around the country. If you do not have access to one of these offices at your activity, contact the above address.

13.2.2 DTIC FOREIGN TECHNOLOGY ACQUISITION

DTIC has always received documents from foreign countries through their respective governments. In fact, DTIC's collection started with captured WWII German and Japanese documents. DTIC has a number of special agreements with friendly countries, including Australia, Canada, Great Britain, Belgium, and West Germany. In addition, DTIC receives NATO documents published by the Advisory Group for Aeronautical Research and Development (AGARD) and the Defense Research Group (DRG). The various translation agencies in the services, such as the Air Force Foreign Aerospace Science and Technology Center, submit translations that are approved for distribution by DTIC.

13.2.3 FOREIGN COMMERCIAL DATABASES

There are a number of foreign databases available to anyone with the language skills. Examples include the six databases available from the Japan Information Center of Science and Technology (JICST). These include the *JICST File on Current Science and Technology Research in Japan*, *JICST File on Government Reports in Japan*, and the *JICST File on Science, Technology, and Medicine in Japan* (in English). Another example is the set of French databases available from the Centre National de la Recherche Scientifique. In addition, an increasing number of databases with translated information, such as *Japan Science Scan* and *Soviet Science and Technology*, are available.

13.2.4 JOINT PUBLICATIONS RESEARCH SERVICE (JPRS)

The *Joint Publications Research Service (JPRS)* is a translation service in the Central Intelligence Agency. The service translates foreign material that provides insight into the current political, economic, or military conditions of a country or region. There is also a series of reports on science and technology. Emphasis has been on communist countries. Two of their well-known services are the *Foreign Broadcast Information Service (FBIS)*, which offers translations to broadcasts that have occurred within the previous 48 to 72 hours, and the *Joint Publications Research Service Reports*. Both of these services are available on subscription, either paper or microfiche, from the National Technical Information Center (NTIS). A complete list of titles and prices is found in the *NTIS Catalog of Products and Services*.

13.2.5 NTIS FOREIGN TECHNOLOGY ACQUISITION

NTIS is the lead U.S. Government agency in the international technical information exchange. The NTIS Office of International Affairs is actively involved in a number of foreign acquisition programs. Agreements with foreign countries have lead to the effective exchange of STI. Approximately 30 percent of the NTIS collection now comes from foreign sources, such as the Japan Ministry of International Trade and Industry and the Japan Science and Technology Agency. According to the 1992 *NTIS Catalog of Products and Services*, the number of titles received annually from the major contributing countries is:

Germany	4,000	United Kingdom	1,700
The Netherlands	2,000	Japan	1,500
Canada	1,700	Sweden	800
France	1,700	USSR	800

Whenever a search of the NTIS database is conducted, the searcher has access to a portion of the world's technology.

13.3 GOVERNMENT-INDUSTRY DATA EXCHANGE PROGRAM (GIDEP)

GIDEP Operations Center
PO Box 8000
Corona, CA 91718-8000
(714) 273-4677 or DSN 933-4677

GIDEP is a cooperative activity between the U.S. Government and industry. The program provides a means to exchange certain types of technical data essential in the research, design, development, production, and operational phases of the life cycle of systems and equipment. By sharing information, expenditures of time and money are reduced or eliminated. Only unclassified publications are submitted to GIDEP. Publications that contain either classified, limited, or proprietary information can not be submitted to GIDEP. In the case of limited publications, an unlimited abstract is submitted to GIDEP.

The four data interchanges (databases) are:

1. **Engineering Data Interchange** - Contains engineering evaluation and qualification test reports, nonstandard parts justification data, parts/materials specifications, manufacturing processes, failure analysis data, and other related engineering data on parts, components, materials, and processes. Reports on specific engineering methodology and techniques are also included.
2. **Metrology Data Interchange** - Contains test equipment calibration procedures and related metrology engineering data on test systems, calibration systems, and measurement technology.
3. **Reliability-Maintainability Data Interchange** - Contains failure rate/mode and replacement rate data on parts and components based on field performance information or based on reliability demonstration tests of equipment, subsystems, and systems. Reports on theories, methods, techniques, and procedures related to reliability and maintainability are also included.
4. **Failure Experience Data Interchange** - Contains objective failure information generated when significant problems are identified on parts, components, processes, fluids, materials, or safety information. The *Alert* and *Safe-Alert* data are included in this interchange.

The databases are not available to the public. They can be accessed only by participants, which include U.S. Government agencies and contractors, universities, and Canadian Department of Defence and Canadian contractors. All GIDEP information must be protected from unauthorized disclosure.

GIDEP participation may be mandatory for your activity. Both the Air Force and Navy require participation. The Air Force regulation is AFR 80-10 and the Navy regulation is OPNAVINST 5200.29. Submission is usually done through the activity's GIDEP representative, who reviews each publication and decides if the information should be submitted. DoD activities are encouraged to participate.

The Navy also suggests that the GIDEP databases be searched before the start of any effort that involves testing parts and components and preparing calibration procedures.

GIDEP provides a number of services to its user community:

1. **Five Data Interchanges** - Access to the databases includes microfilm sets of source documents, hard copy indexes, and online access to the databases.
2. **Alerts** - These reports contain failure information.
3. **Safe-Alerts** - Similar to the *Alerts*, these reports pertain to safety problems for personnel or risk of damage to facilities or equipment.
4. **Urgent Data Requests** - GIDEP members can query each other on specific problems.

There is no formal relationship between GIDEP and the STINFO program. However, the GIDEP duties may be assigned to the STINFO office. The STINFO Manager should:

1. Determine if the activity should be a GIDEP participant, if it is not one currently.
2. Consult with the GIDEP representative on the types of information submitted to GIDEP.
3. Ensure that the technical library has access to the GIDEP databases and maintains a collection of GIDEP microfilm, *Alerts*, *Safe-Alerts*, etc.
4. Promote the GIDEP program to the user community and include information about it in training and STINFO materials.

13.4 INDEPENDENT RESEARCH AND DEVELOPMENT (IR&D) PROGRAM

KEY POINTS

- DoD encourages its contractors to engage in research and development activities of potential interest to DoD. These activities are initiated and funded by the companies and fall under the IR&D program.
- Documentation:
 - DoD Instruction 3204.1, *Independent Research and Development (Draft)*
 - DLAM 4185.9, *IR&D Database Input Manual (Draft)*
 - DLAM 4185.11, *IR&D Users Manual*
 - DTIC Form 271, *IR&D Data Sheet*
 - DTICH 4185.5, *IR&D Contributing Organizations* (available to DoD classified sites only)
 - Implementing regulations: AR 70-74, SECNAVINST 3900.40B
 - Publications will be revised because of major changes in the program. A copy of the DoD instruction is found in the STINFO Documentation binder of your training material.
- The IR&D program was restructured and “streamlined” in FY92.
- DTIC maintains the IR&D database (DROLS) that contains the project descriptions. The database was redesigned in FY92.
- The STINFO Manager has no direct responsibility for the IR&D program but should:
 - Ensure that the IR&D database is searched whenever a new R&D work effort is initiated at the activity.
 - Know who the IR&D focal point is, if the activity is a program participant.
 - Know the location and status of the project descriptions for user referrals.
 - Include the IR&D program in user training and STINFO materials.

13.4.1 WHAT IS IR&D?

IR&D is a DoD program that encompasses the technical efforts, i.e., projects, of DoD contractors that are initiated and funded by the companies themselves. IR&D is directed toward continually improving

the contractor's technological competence to meet DoD's future requirements for advanced technology, systems, or hardware in a timely and technically competitive manner.

The IR&D program was restructured and "streamlined" in FY92. At one time, participation was mandatory for companies if their total bids and proposals were over a certain amount. It is now considered a "voluntary" program. Narrowly defined DoD requirements have been replaced by broad objectives with commercial value. A two-year reporting cycle was considered, but the annual reporting has been retained. In past years, a portion of contractor IR&D expenditures were reimbursed by DoD through negotiated advance agreements. The negotiations have been removed and replaced by a formula whereby contractors will recover an increasing percentage of their IR&D costs, to a maximum of 100% beginning in FY96.

The information generated from the IR&D program is considered proprietary and available only to DoD organizations and other qualified government activities. In addition, the information is exempt from disclosure under FOIA.

DTIC maintains the IR&D database on DROLS, and it contains descriptions of the technical efforts of the participating companies. The database is considered the central source for IR&D information. Submissions to the IR&D database must be in machine-readable format, i.e., diskette or magnetic tape, and formatted according to the requirements in DLAM 4185.9, *Independent Research and Development Database Input Manual (Draft)*. Submissions are due by March 15 of each fiscal year.

The IR&D information has important uses. For example, whenever a new DoD project is proposed, the IR&D database should be searched to determine any duplication of effort or similar projects. Also, when seeking contractors or evaluating proposals, the database can be valuable in determining a track record, accomplishments, or ongoing work in a particular field.

13.4.2 STREAMLINING

In addition to the restructuring, the IR&D program was "streamlined", and a number of changes were implemented in FY92. One major change involves the reporting requirements. In the past, contractors prepared mandatory technical plans or "brochures" each year. A technical plan contained a company overview; a description of technical accomplishments; brief project descriptions for all the planned and ongoing work under the program; and a point of contact for each project. These plans were multi volume sets, and contractors spent a great deal of money to make the documents look as good as possible. It was required that copies of the technical plans be sent to each DoD R&D laboratory.

The technical plan has been replaced by a much simpler "document". DD Form 271 has been retained as an input worksheet. It contains company overview information in two parts, as well as technical project information. The information in the overview is similar to the executive summary found in the technical plan. "OVA" summarizes the overall business aspects of the company/division and its IR&D program. "OVB" lists all the company's projects by project number and includes prior year and submittal year expenditures for each project. "OVBB" can be used to list additional projects. The individual project descriptions comprise the major part of the "document". The overviews and individual project descriptions have a maximum page limit of five pages each. It is no longer mandatory to distribute copies of the project descriptions to all R&D laboratories. The contractor may choose, however, to distribute copies to a select number of activities.

The other major changes are the elimination of the mandatory on-site reviews and the evaluations that involved scoring. The on-site review has been replaced by the technical interchange meeting that is arranged by mutual agreement between the contractor and the government. The meetings may take various forms, including the established format of an on-site review without the scoring process. The scoring had played a role in determining the dollar value of the IR&D recovery monies.

One of the major responsibilities of the local IR&D focal point was to conduct the evaluations. This has been eliminated. The focal point is, however, involved in the technical interchange meetings and maintains copies of project descriptions.

Although restructured and streamlined, the IR&D program is still considered a valuable national asset, i.e., more than \$4B per year. It makes a significant contribution to both DoD and commercial technology needs.

13.4.3 IR&D DATABASE REDESIGN

As part of the recent changes to the IR&D program, the IR&D database was redesigned in FY92. The major change to the database is the increased record length. This allows for the input of expanded IR&D data, i.e., the overviews and detailed project descriptions. Currently, there are no overview records in the database because submissions are not due until March 15, 1993. The other important change is that mnemonics can now be used to search the database.

13.5 TECHNICAL MEETINGS

KEY POINTS

- DoD encourages the sponsorship of technical meetings. It also encourages DoD personnel to give STI presentations at meetings. Both activities, of course, are subject to security and other dissemination controls.
- There are a number of DoD and military services regulations that support DoD involvement in meetings. DoD Directive 5200.12, *Conduct of Classified Meetings*, and DoD Directive 5230.27, *Presentation of DoD-Related Scientific and Technical Papers at Meetings*, contain basic policies and procedures.
- AFR 83-6, *Sponsoring or Cosponsoring, Conducting, and Presenting DoD-Related Scientific Papers at Unclassified and Classified Conferences, Symposia, and Other Similar Meetings*, is the Air Force governing regulation. AFR 83-1 states that the STINFO Manager serves as the Office of Primary Responsibility (OPR) for meetings. AFR 83-6 includes a step by step sequence of actions to follow to arrange a conference or symposium.
- Army policies and procedures regarding meetings are contained in Chapter 8 of AR 70-45. Army LABCOM-P 1-1, *Conference Security Guidelines*, is an excellent reference on this topic. It answers the who, what, when, where, and why of conferences and includes a valuable preparation checklist.
- The STINFO Manager should:
 - Become familiar with DoD and military service policies and procedures for sponsoring and participating in meetings.

- Establish a request procedure for sponsoring a meeting.
- Provide guidance on other procedures and policies to follow, e.g., required endorsements, forms and letters to submit, expected lead times, etc. This includes presenters, as well as sponsors.
- Serve as a consultant to the meeting manager during the planning stages.
- Track all presented papers and ensure that they meet all the STINFO policies and procedures, e.g., papers are submitted to DTIC.

Copies of the cited regulations are found in the STINFO Documentation binder of your training material.

13.5.1 WHAT IS A TECHNICAL MEETING?

The definition of a technical meeting has three elements:

1. It is a conference, seminar, symposium, exhibit, convention, or other type of formally scheduled session. Advance Planning Briefings for Industry (APBI) are also included.
2. It is conducted, sponsored, or co-sponsored by a DoD organization, DoD contractor, or a private association, institute, or society whose membership includes DoD personnel or DoD contractors.
3. Official information is disclosed outside official DoD channels.

There are also audience and size considerations that may impact this definition. For example, a meeting of just DoD personnel or contractor and DoD personnel involved in a specific project is not usually considered a "technical meeting" even if it is formally scheduled.

13.5.2 SPONSORING/COSPONSORING TECHNICAL MEETINGS

As stated in DoD Directive 3200.12, DoD organizations are encouraged to sponsor or cosponsor technical meetings when it is in the interest of DoD to have the information issued promptly and widely, and to exploit discoveries and share information, innovations, and inventions. Determining factors include:

1. Sponsorship of meeting serves a specific DoD purpose.
2. Other prescribed information dissemination channels will not accomplish the purpose of the meeting.
3. Adequate security measures and access control procedures have been developed and will be implemented.
4. The meeting site is under the security cognizance of a U.S. Government agency or a U.S. contractor having an appropriate facility security clearance.

A conference manager must be appointed by the sponsoring DoD organization at the beginning of the planning stages for the meeting. A security manager must also be appointed. He or she must be a DoD employee and is responsible for all dissemination controls.

DoD activities can not cosponsor meetings with non-government organizations.

Since these meetings involve the dissemination of DoD information, they are subject to regulation regarding security and other dissemination controls. The following controls are involved:

1. A technical meeting where CLASSIFIED scientific and technical information is disclosed is subject to a number of controls. Among the more important are:
 - a. The meeting may only be sponsored by a DoD activity.
 - b. The number of such meetings must be limited.
 - c. The sponsoring activity takes on the burden of security and must appoint a security manager to ensure that the provisions of all security regulations are met.
 - d. The meeting may only be held at either a DoD site or a cleared contractor site.
2. A technical meeting where Unclassified EXPORT-CONTROLLED information is disclosed is also subject to controls. The most important is that such data can be presented only in sessions where the recipients are eligible to receive such data, unless specific release authority has been received. The *Certified Contractor Access List (CCAL)* should be consulted.
3. A technical meeting involving the PUBLIC is subject to the Security and Policy Review process performed by the Public Affairs Office. This is true for all DoD employee unclassified presentations and all DoD contractor presentations if stipulated in the contract.

13.5.3 FOREIGN PARTICIPATION IN TECHNICAL MEETINGS

A technical meeting that will involve foreign participants is subject to the rules of foreign disclosure, and all presentations must be cleared by the Foreign Disclosure Policy Office.

The rules concerning foreign participation are different for classified and unclassified meetings.

If the meeting is CLASSIFIED, policies and procedures are established by:

1. DoD Directive 5230.11, *Disclosure of Classified Military Information to Foreign Governments and International Organizations*
2. DoD Instruction 5230.20, *Visits and Assignments of Foreign Representatives*

In addition, all foreign participation in classified meetings must be reported.

If the meeting is UNCLASSIFIED, foreign participation is under the control of the meeting sponsor. If there is foreign participation, the level of DoD participation must be considered, especially in the matter of export-controlled information.

Meetings that disclose procurement information are open to foreign participation.

Copies of the regulations concerned with foreign participation are found in the STINFO Documentation binder of your training material.

13.5.4 PROCEEDINGS OF TECHNICAL MEETINGS

The papers presented at technical meetings are considered STI publications and should meet all the STINFO program requirements and procedures. The STINFO Manager should promote this to all presenters and include this source in the publication tracking system.

DoD Directive 5230.27 states that copies of proceedings and/or reprints of papers sponsored by DoD for all STI meetings will be provided to DTIC for secondary distribution. It is a local decision whether the set of papers are prepared and submitted to DTIC as a single document, i.e., proceedings, or as separate documents. Classified and unclassified papers should always be published as separate documents.

13.5.5 Documentation

Major documents that support the conduct of technical meetings are:

1. *AFR 83-6, Sponsoring or Cosponsoring, Conducting, and Presenting DoD-Related Scientific Papers at Unclassified and Classified Conferences, Symposia, and Other Similar Meetings.*
2. *Army LABCOP-P 1-1, Conference Security Guidelines.*
3. *DoD Directive 5230.11, Disclosure of Classified Military Information to Foreign Governments and International Organizations.*
4. *DoD Directive 5230.27, Presentation of DoD-Related Scientific and Technical Papers at Meetings.*
5. *DoD Instruction 5200.12, Conduct of Classified Meetings.*
6. *DoD Instruction 5230.20, Visits and Assignments of Foreign Representatives.*

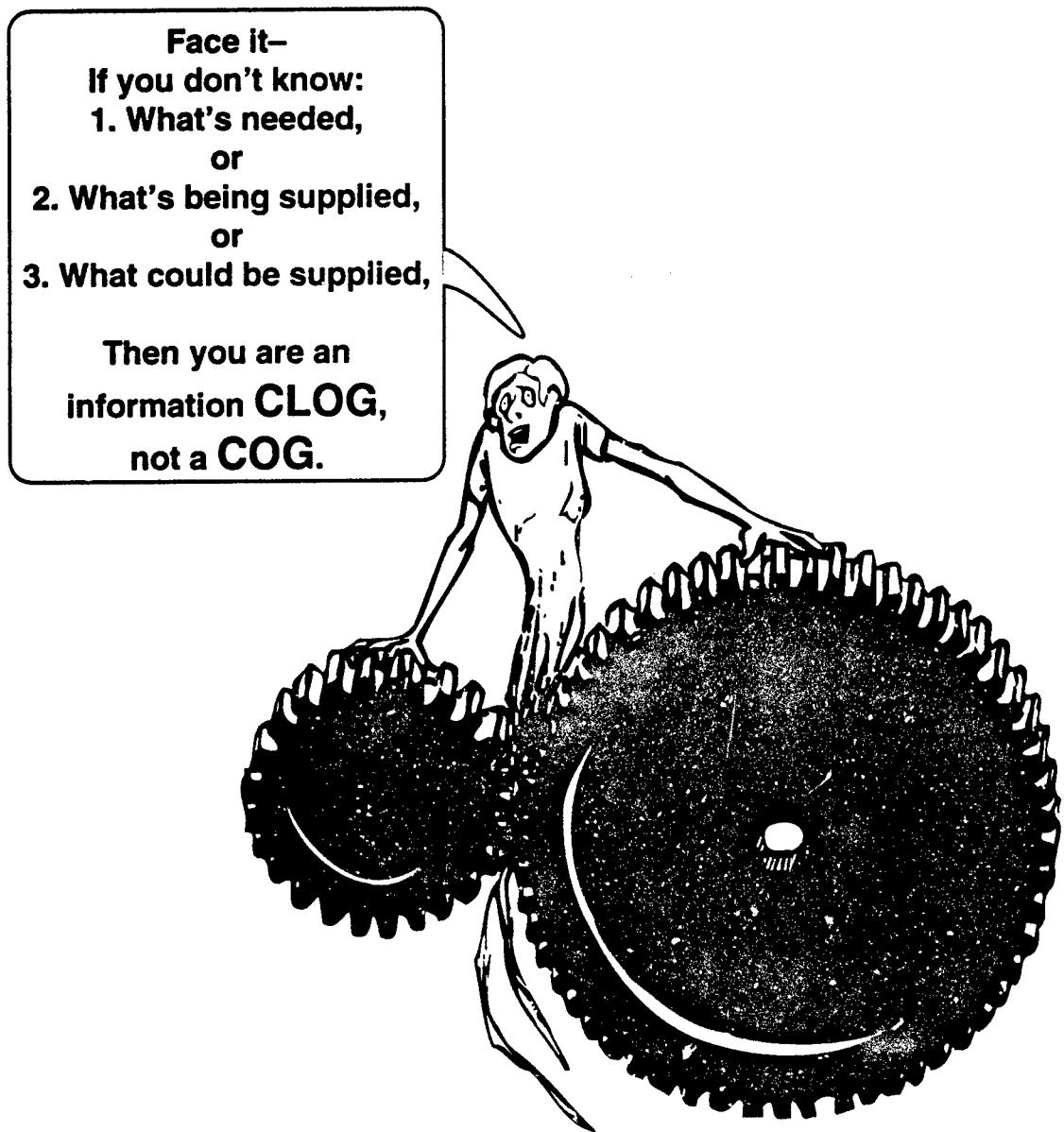


Figure 37 - Information CLOG

14. LIAISON AND COORDINATION

As emphasized throughout this course, the STINFO Manager is the primary point of contact for policies and procedures regarding STI support, services, and resources at the organization. In fulfilling this role in the day-to-day operations of the STINFO program, the manager must interface with many offices, programs, groups, and individuals. This contact varies, from having just an awareness of a program or office, to maintaining a liaison relationship, and finally to maintaining an active support or coordination relationship. AFR 83-1 states that the STINFO program should be closely coordinated with appropriate offices, and the operation of any Information Analysis Centers (IACs) at the activity should be monitored.

Some of these offices, programs, groups, and individuals are:

- *Contracting Office*
- *Data Management Office*
- *Defense Technical Information Center*
- *Editing and Illustration Group*
- *Foreign Disclosure Policy Office*
- *Freedom of Information Act Focal Point*
- *Government-Industry Data Exchange Program*
- *Independent Research & Development Focal Point*
- *Information for Industry Offices*
- *Information Analysis Centers*
- *Intelligence Office*
- *Local Engineers and Scientists*
- *National Technical Information Service*
- *Office of Research and Technology Applications*
- *Potential Contractor Program*
- *Program Management Offices*
- *Printing and Reproduction*
- *Public Affairs Office*
- *Security Office*
- *Small Business Innovation Research Program*
- *Staff Judge Advocate and Patent Office*
- *Technical Library*
- *Unit Command Structure*

We will be discussing some of these in the next few chapters.

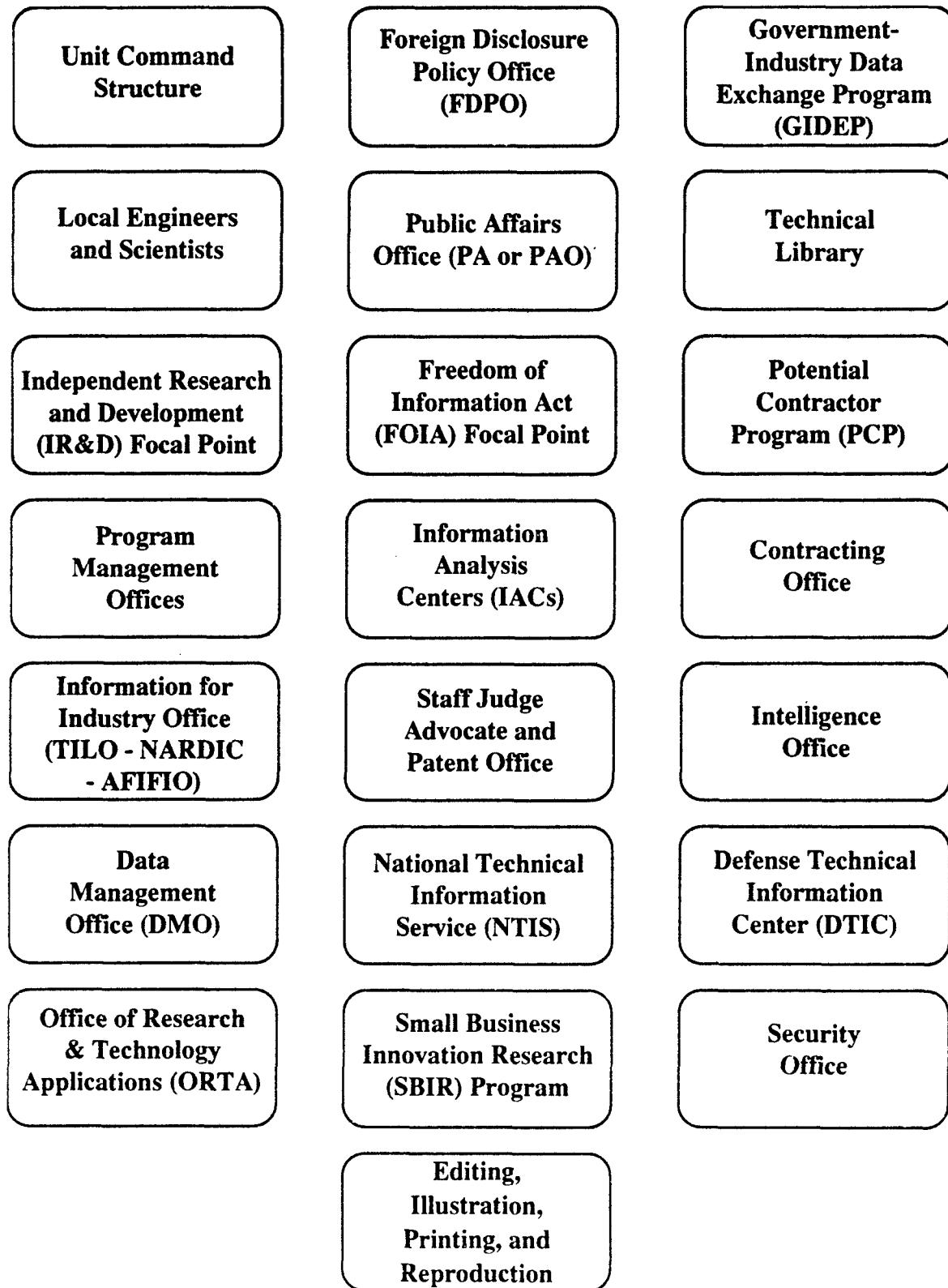


Figure 38 - Some Offices and Programs the STINFO works with

15. LIAISON AND COORDINATION - DOMESTIC TECHNOLOGY TRANSFER (DTT) AND PATENTS

KEY POINTS

- The Office of Research and Technology Applications (ORTA) is one of the offices that the STINFO Manager interacts with. AFR 83-1 states that the STINFO Manager serves as the Office of Primary Responsibility (OPR) for providing appropriate support to the local ORTA. AR 70-45 states that the Army STINFO program supports the DTT. The Navy considers DTT as part of its STIP program. For this reason, knowledge of DTT is very useful.
- For the purpose of this course, technology transfer refers to domestic transfer only.
- Within the context of federal legislation, technology transfer is the process by which knowledge, capabilities, information, and ideas developed under federal funding are made available to fulfill public or private sector needs. For DoD, this means the transfer of technology developed for military applications to the nonfederal sector where it can be used in nonmilitary applications. All controls on classified material, distribution limitations, and export control apply.
- The transfer process is bilateral. Both the U.S. Government and the nonfederal sector receive new ideas, technologies, information, etc.
- There are two formal transfer mechanisms between the U.S. Government and the nonfederal sector: patent licensing and Cooperative Research and Development Agreements (CDRAs). Both involve a formal transfer of technology in exchange for funding.
- Some of the organizations involved in technology transfer are:
 - **Federal Laboratory Consortium (FLC) for Technology Transfer**
 - **National Technical Information Service (NTIS)**
 - **National Technology Transfer Center (NTTC)**
 - **Office of Federal Patent Licensing (OFPL)**
 - **Office of Research and Technology Applications (ORTA)**
 - DoD 3200.12-R-4, *Domestic Technology Transfer Program Regulation*, is the governing regulation. Implementing regulations are: AFR 80-27, AR 70-57, SECNAVINST 5700.16, and OCNRINST 5700.1. A copy of DoD 3200.12-R-4 is found in the STINFO Documentation binder of your training material.
- The STINFO Manager should be aware that:
 - A work unit summary must be completed for each CRDA and reported to the WUIS database within 30 days after the agreement is initiated.
 - The work unit summary includes a field indicating domestic technology transfer applicability, i.e., high, low, no. It is recommended that this field be completed.
 - Patent applications and patents are considered STI. Applications can be classified or unclassified, while all patents are unclassified. Unclassified applications and patents should be submitted to DTIC. DTIC distributes applications, but patents are only announced in the Technical Report database on DROLS. Copies of all applications and patents are available from the U.S. Patent and Trademark Office.

- In-house unclassified documents that contain patentable information should be referred to the ORTA and patent personnel. A determination is made on whether a patent application is warranted. The document is not distributed outside the U.S. Government until the application has been filed.

15.1 WHAT IS DOMESTIC TECHNOLOGY TRANSFER (DTT)?

Technology transfer can be defined as the movement or conveyance of a unique combination of tools, techniques, and methods (**a technology**) from one group to another. For the U.S. Government, this is the U.S. public and private sectors. The technology may take the form of products, techniques, expertise, processes, or services that are further modified for commercialization. Technology transfer usually includes transfer of legal titles that the second group requires to apply the technology. Transfer by the U.S. Government never involves the transfer of funds to the nonfederal sector, and the government retains a license to use the technology for its purposes.

There are two basic types of technology transfer. The first kind is **“informational”** and includes advice, technical assistance, reports, etc., to the extent the aid is not detrimental to the agency’s mission. The process is best handled through the state and regional DTT system since the idea is to have a network of experts that can be accessed by business to find a solution to a technical problem. The second kind is formal and involves intellectual property. The U.S. Government may also directly benefit. Examples include cooperative R&D agreements and the granting or licensing of patent rights.

There are benefits for both parties (Figure 39). Companies can cut costs and risks associated with new product development and manufacturing process improvement. The U.S. Government receives valuable data, equipment, personnel, etc. Laboratories and their scientists and engineers benefit financially from the sharing of royalty payments. In addition, Federal Government employees receive cash awards for facilitating: a) technical advancements that have either commercial value or contribute to agency missions and/or b) transfer of technologies to the nonfederal sector.

For the nation as a whole, technology transfer contributes to technical growth, economic development, and U.S. industrial competitiveness. With Congressional mandates, the economic recession, and the military downsizing, there is a renewed interest on the part of both the Federal Government, including DoD, and industry in commercialization of federally-developed technologies. The Commerce Department’s National Technology Initiative and the recent creation of the National Technology Transfer Center (see Section 15.9) are indications of the national priority being placed on technology transfer.

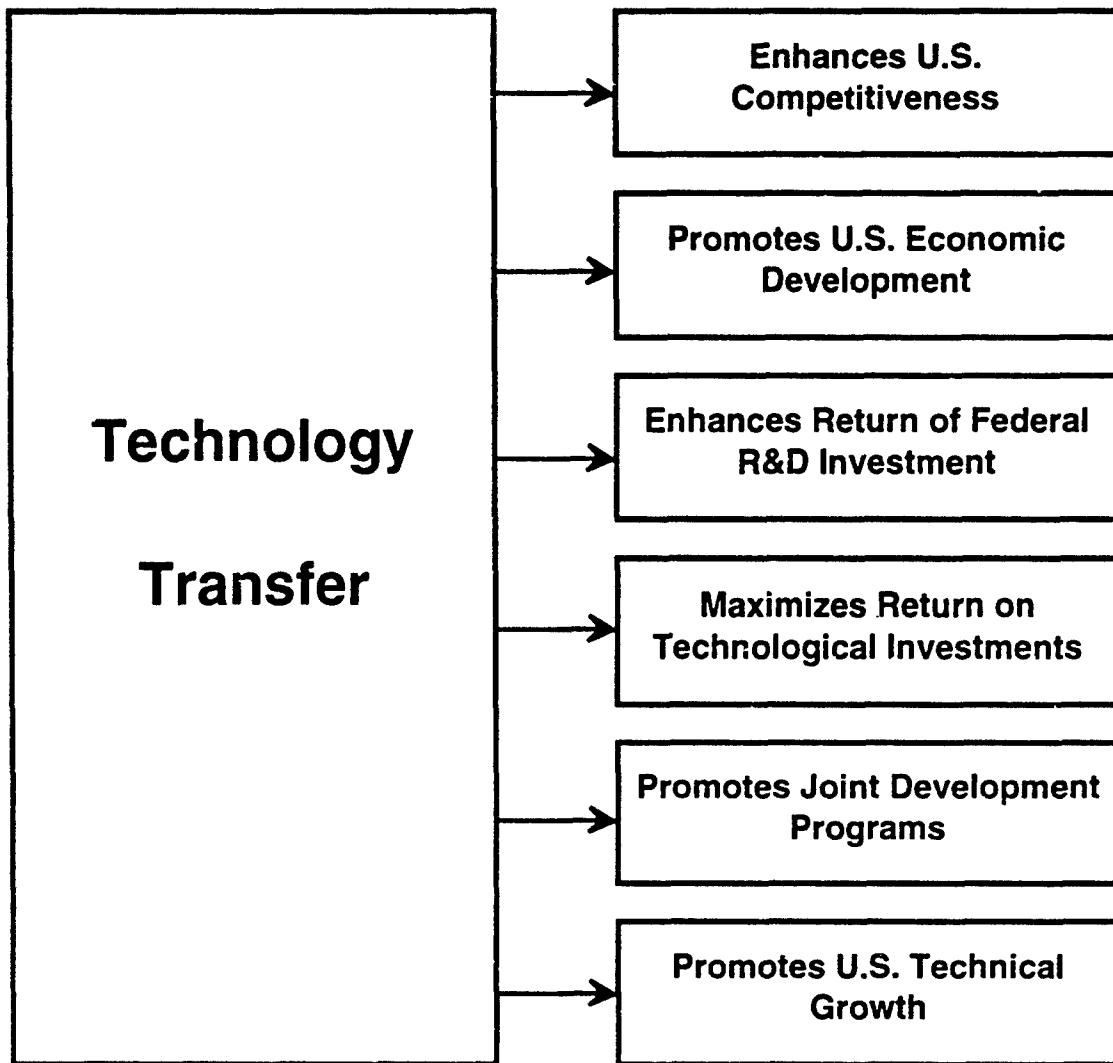


Figure 39 - Benefits of Technology Transfer

15.2 TECHNOLOGY TRANSFER LEGISLATION

Technology transfer is a relatively new mission for most federal agencies. Until recently, the federal laboratory system was an untapped source of valuable new technology. Since 1980, legislation has established technology transfer as an important U.S. Government activity and provided for agency benefits. Nine major bills were passed in the 1980s, but there are two major laws governing all technology transfer activities in the Federal Government.

The *Stevenson-Wydler Technology Innovation Act of 1980* (P.L. 96-480) established a legislative mandate that technology transfer is an important Federal Government activity for improving the economic, social, and environmental well-being of the U.S. Three major provisions are:

- I. The Federal Government should seek to transfer technology it originates to state and local governments and private industry.

2. Each federal laboratory is required to have an Office of Research and Technology Applications (ORTA) to facilitate industry access to federally developed technology.
3. A Center for the Utilization of Federal Technology (CUFT) is to be established as a central federal clearinghouse for technology transfer information. (CUFT was changed to NTIS in 1986 legislation.)

The *Federal Technology Transfer Act (FTTA) of 1986 (P.L. 99-502)* amended and expanded the *Stevenson-Wydler Act*. It increased the importance of technology transfer for federal agencies by making it a core mission. It increased the incentives for agency participation. This Act provides the fundamental guidance for federal technology transfer. Among its provisions, the FTTA:

1. Encourages federal agencies to grant exclusive licenses to technology in exchange for royalties.
2. Provides for allocating royalties among the inventor, the laboratory where the invention was developed, the agency, and the Treasury.
3. Encourages cooperative research and development projects and the exchange of personnel with individual companies or consortia.
4. Decentralizes authority for entering into licenses and cooperative research and development agreements to the heads of federal laboratories.
5. Establishes the Federal Laboratory Consortium (FLC) for Technology Transfer as a mechanism for government-wide cooperation and coordination.

Facilitating Access to Science and Technology, Executive Order 12591, makes key discretionary features of the FTTA mandatory for all agencies. It also ordered other actions. For example, it ordered the accelerated transfer of technology from the Department of Defense.

Technology transfer legislation continues to be passed in the 1990's. One, in particular, is the *American Technology Preeminence Act of 1991 (P.L. 102-245)*. This Act contains a number of provisions that further strengthens the process of transferring technology. Among its provisions, the Act:

1. Requires the head of each federal executive department or agency to transfer in a timely manner to NTIS unclassified STI resulting from federally funded R&D activities for dissemination to the private sector, etc. Such information includes technical reports and information, computer software, application assessments, and information regarding training technology and other federally owned or originated technologies.
2. Strengthens the Advanced Technology Program. This program promotes and assists in the development and commercialization of advanced and emerging technologies.
3. Requires the Secretary of Commerce to report on the advisability of authorizing a new form of cooperative research and development agreement that would permit federal contributions of funds.

15.3 DOD AND TECHNOLOGY TRANSFER

DoD Regulation 3200.12-R-4 establishes the DoD Domestic Technology Transfer Program. The purpose of the DoD DTT program is to ensure the full use of the nation's federal investment in research and development, stimulating improved use by state and local governments and the private sector.

The regulation consists of:

1. DoD policies concerning technology transfer.
2. The responsibilities of the Heads of DoD Components.
3. The major principles under which the program will operate.
4. The functions of an ORTA.

The overall DoD policy is to encourage the dissemination of scientific and technical information, data, and know-how developed by or for the Department of Defense to state and local governments and to the private sector, consistent with the requirements of U.S. national security. Figure 40 shows some of the parties that benefit from DoD technology.

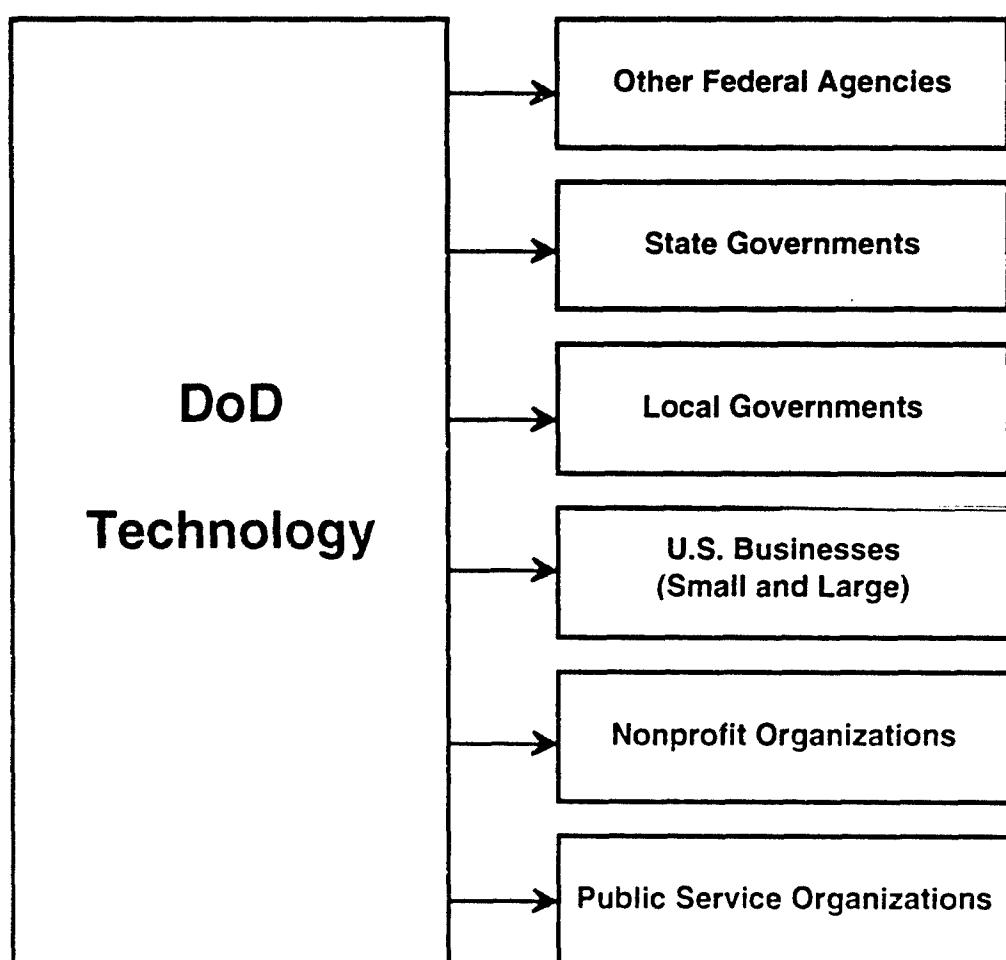


Figure 40 - Recipients of DoD Technology

As stated in the regulation, some of the responsibilities of the Heads of DoD Components are to:

1. Designate a headquarters point of contact for domestic technology transfer activities.
2. Establish an ORTA at laboratories and other activities to perform technology transfer functions.
3. Specify the R&D activities that require a full-time equivalent position to be responsible for performing the ORTA functions.
4. Be authorized to license, assign, or waive rights to intellectual property developed by the DoD laboratories through cooperative R&D agreements or solely within or under the direct control of the laboratories.
5. Cooperate with other federal agencies to maximize the effectiveness of federal domestic technology transfer efforts.
6. Establish a mechanism for coordinating domestic technology transfer efforts with the Small and Disadvantaged Business Utilization Specialists to stimulate commercialization of appropriate technologies by small business.
7. Document and input a description of all CRDAs to the WUIS database within 30 days of the initiation of such agreements.

Figure 41 shows some of the transfer methods used by DoD.

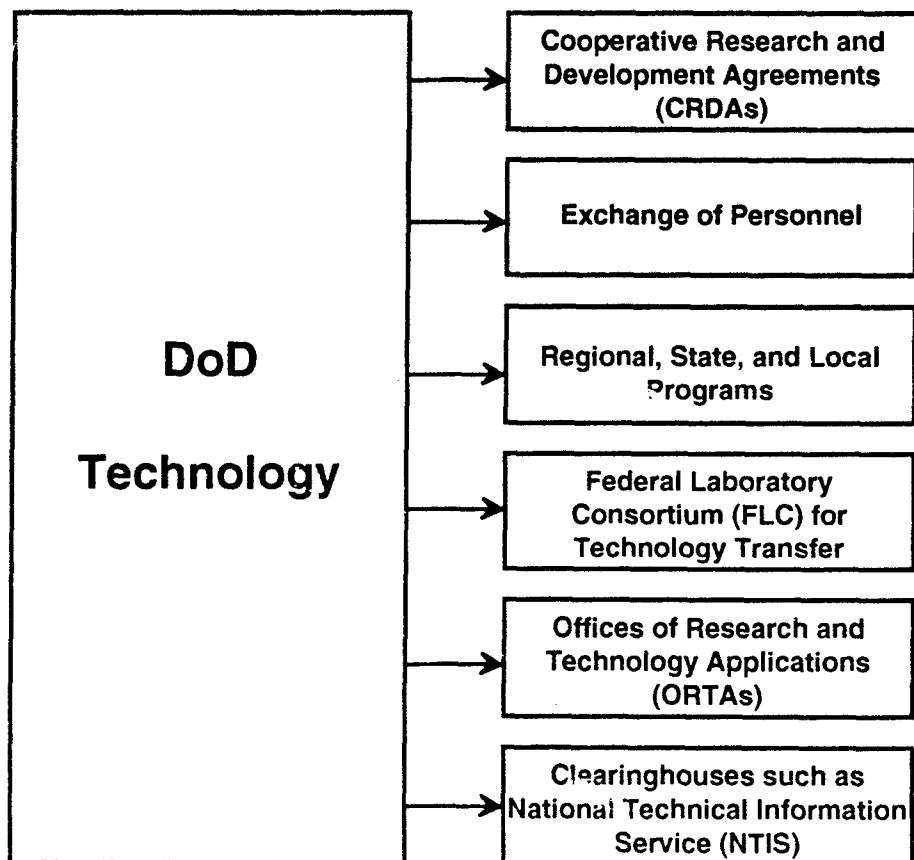


Figure 41 - How DoD Transfers Technology

15.4 OFFICE OF RESEARCH AND TECHNOLOGY APPLICATIONS (ORTA)

The *Stevenson-Wydler Act* called for the establishment of an ORTA at each federal laboratory. The FTTA requires all R&D activities with 200 or more full-time equivalent scientific, engineering, and related technical personnel to assign at least one person to perform ORTA functions. An ORTA manages and coordinates the activity's technology transfer efforts. The Office serves as an **Advocate** for technology transfer within the organization and markets technology to potential parties on the outside. At least one member of the ORTA staff is the FLC representative. Every two years, the Secretary of Commerce submits a summary report to the President and Congress concerning the implementation of the FTTA. The ORTA provides the input for their particular laboratory.

The minimum functions of an ORTA are listed in DoD 3200.12-R-4, and the first four are the same as listed in the recent legislation. The functions are to:

1. Prepare an application assessment (i.e., **technology application assessment**) of selected R&D projects that have potential commercial applications.
2. Provide and disseminate information on federally owned or originated products, processes, and services having potential application to state and local governments and to private industry.
3. Cooperate with and assist NTIS, the FLC, and other organizations that link the R&D resources of that laboratory and the Federal Government as a whole to potential users in state and local government and private industry.
4. Participate, where feasible, in regional, state, and local programs designed to facilitate technology transfer.
5. Participate in appropriate activities of the public and private sector that provide the opportunities to achieve technology transfer objectives, e.g., local government meetings or small business conferences.
6. Assist program managers and technical department heads in identifying technologies suitable for transfer and for which application assessments need to be developed.
7. Coordinate domestic technology transfer activities with patent counsel to determine rights to technical data, patent and licensing implications, and the commercial potential of patentable technology.
8. Ensure that no domestic technology transfer functions substantially compete with similar services available in the private sector.
9. Ensure that no domestic technology transfer functions conflict with export control regulations, policies governing militarily critical technology, or any of the responsibilities and procedures for technology transfer control in DoD directives, instructions, and publications.

Figure 42 is another way to look at the functions of an ORTA.

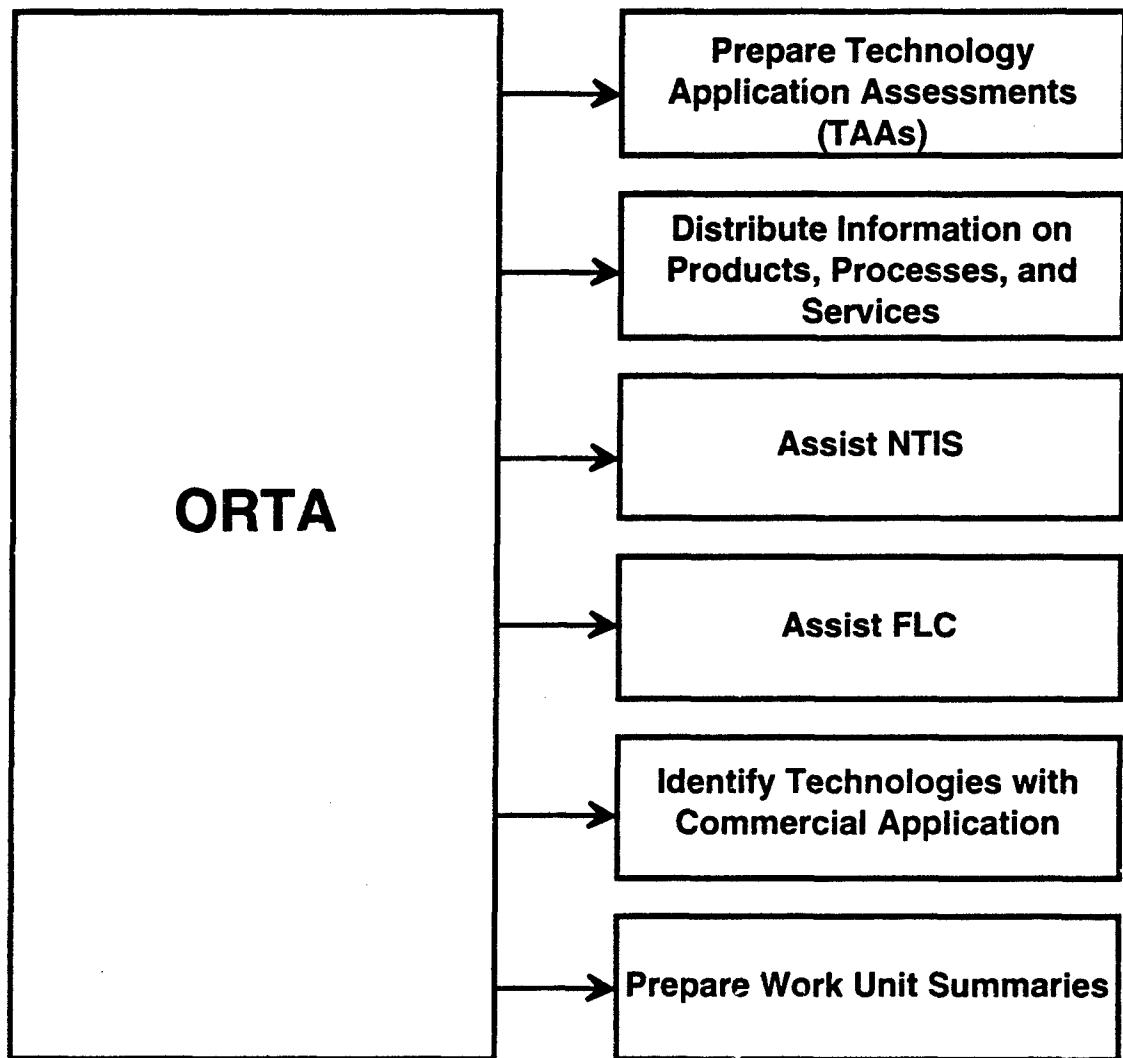


Figure 42 - Typical Duties of an ORTA

15.5 TECHNOLOGY APPLICATION ASSESSMENT (TAA)

A **Technology Application Assessment (TAA)** has been mentioned several times in this chapter, including the legislative mandate. The assessment of technology at a laboratory is a process that involves continual interaction between the ORTA staff and the scientists and engineers, as well as the review of patent applications and other project-related documents. The knowledge gained from this process by the ORTA helps prepare the assessments. A TAA is a summary description of the potential application of a technological development. The assessment includes a brief description of the technology, the current stage of development, potential applications, patent status, copyright status, any publications, and additional information including point of contact. TAAs are submitted to NTIS and other appropriate public information sources.

The *AFSC (Air Force Systems Command) Domestic Technology Transfer Handbook* contains examples of technology application assessments.

15.6 COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRDA)

A Cooperative Research And Development Agreement (CRDA) is one transfer mechanism between the U.S. Government and the nonfederal sector. The FTTA gives laboratories latitude to enter into CRDAs with nonfederal parties. A CRDA is a written agreement, but it is not a procurement contract and competition requirements do not apply.

A CRDA involves the transfer of money and/or services (and possibly research results) from the private sector participant to the federal developer of the technology. All parties to the project commonly participate in R&D. Small business is given special consideration in awarding CRDAs. Preference is also given to businesses located within the U.S. that agree to manufacture within the country products that either embody inventions made under CRDAs or are produced through the use of such inventions. CRDAs are permitted with foreign-owned, -controlled, or -influenced U.S. organizations under certain conditions. A work unit summary must be completed for each CRDA and reported to the WUIS database within 30 days after initiating the agreement.

Provisions of these agreements allow a laboratory to:

1. Accept, retain, and use funds, personnel, services, and property provided by the collaborating party.
2. Provide personnel, services, and property (but no funds) to the collaborating party.
3. Grant patent licenses to the collaborating party.
4. Permit employees or former employees to commercialize inventions they made while employed by the U.S.

CRDAs are often used to license or assign rights to intellectual property developed by U.S. Government scientists and engineers. The U.S. Government, as a minimum, retains a royalty-free right to use, for governmental purposes, any invention made under a CRDA.

When royalties or cash awards are involved, provisions of CRDAs allow a laboratory to:

1. Distribute financial awards to laboratory personnel for facilitating: a) advancements that have either commercial value or contribute to agency missions and/or b) the transfer of technology to the nonfederal sector.
2. Pay the inventor at least 15% of royalties (DoD grants 20%) generated with a maximum payment of \$100,000 per year.
3. Allows an employee-inventor to pursue a patent if the U.S. Government chooses not to do so.

AFR 80-27 and the AFSC Domestic Technology Transfer Handbook contain model CRDAs.



Figure 43

15.7 FEDERAL LABORATORY CONSORTIUM (FLC) FOR TECHNOLOGY TRANSFER

The FLC is a service organization that supports and promotes the federal technology transfer program. It was originally established under the auspices of DoD in 1971 to assist the department in transferring technology to state and local governments. It was expanded several years later to include other federal agencies. The FTTA established the FLC with a formal charter. The primary purpose of the FLC is to link the federal laboratory system with the public and private sectors. It does not engage directly in the transfer of technology but assists and supports the laboratories in this function.

The FLC is composed of some 400 federal laboratories and research centers representing 12 federal agencies. Each of these facilities supports an FLC Representative (i.e., usually the senior member of the ORTA staff), who, in addition to representing the local facility, maintains contact with others through a national network of individuals dedicated to DTT.

The FLC is a national organization with three levels. At the national level, there is a chairperson, an executive director, a technical specialty coordinator, and a Washington DC liaison. Under this level is a network of six regional coordinators. Under the regional level are the representatives of the participating laboratories. Access to the resources of the full federal laboratory system is through any of these key personnel.

The FLC has established a clearinghouse that functions as a brokerage service. It assists in matching technical requests from industry, state, or local government, or a university with the appropriate federal laboratories. Once the linkage is made, the arrangements for the actual technical exchange is between the user and the laboratory.

15.8 NTIS AND OTHER INFORMATION SOURCES ON TECHNOLOGY TRANSFER

The FLC and NTIS are the two major sources of information on new federal technology. NTIS is considered the U.S. Government's central source for scientific and technical information, including new federal technology.

The *Stevenson-Wydler Act* established a Center for the Utilization of Federal Technology (CUFT) within NTIS to alert industry to selected federal technology with immediate practical value. CUFT's main activities revolved around the promotion of technology transfer and: a) handled the *Tech Notes* program; b) published special directories on technology transfer; and c) managed patent licensing of U.S. Government owned inventions through the Office of Federal Patent Licensing (OFPL).

CUFT was eliminated in a reorganization in FY92. NTIS still publishes some of the directories. The *Tech Notes* program, which included the required TAAs, was phased out in FY92. OFPL now exists as a separate organization and is going through changes (see Section 15.10).

Three NTIS publications that identify federal inventions and technologies are:

1. *NTIS Alert on Government Inventions for Licensing* is a bimonthly bulletin that announces new inventions from federal laboratories. The bulletin describes each invention and identifies supporting material. Some of the inventions require very little development before they are ready to market.
2. *Catalog of Government Inventions Available for Licensing* is the annual compilation of the inventions announced in the bimonthly bulletin. It has been published annually since 1981.
3. *Directory of Federal Laboratory and Technology Resources* is a biennial publication that contains detailed summaries of more than 1,000 laboratories and other technology resources. Each summary lists the contact name, address, and telephone number.

Since we are discussing publications, let's mention two others of interest:

4. *Official Gazette of the U.S. Patent and Trademark Office* is a weekly abstract that announces all patents, whether government-owned or not. The publication is a common reference book in the library and patent counsel office.

5. *Small Business Guide to Federal R&D Funding Opportunities* is a primer on doing business with the U.S. Government, including technology transfer opportunities. It is available from the National Science Foundation.

The U.S. Department of Commerce's Clearinghouse for State and Local Initiatives on Productivity, Technology and Innovation maintains a database of over 700 local, state, and federal technology programs, including technology transfer.

15.9 NATIONAL TECHNOLOGY TRANSFER CENTER (NTTC)

National Technology Transfer Center
316 Washington Avenue
Wheeling, WV 26003
(304) 243-2455 or (800) 678-6882

There is a new player that serves as an advocate of technology transfer. The National Technology Transfer Center (NTTC) was created by legislation in 1991 with initial funding from NASA for five years. It became fully operational October 1, 1992. According to its brochure, NTTC has the following mission:

- To help turn government research results into practical, commercially relevant technological tools for U.S. companies.
- To chart a course through the maze that has impeded technology transfer from the Federal Government.
- To translate the language of research into the speech of the marketplace.
- To give U.S. companies an edge that just might make the difference between success or failure in the relentless arena of world competition.

The Center acts as the hub for a new nationwide technology transfer network, a system of federally financed initiatives to help the U.S. better compete in world markets. NTTC works closely with the Federal Laboratory Consortium, the six regional technology transfer centers, and other appropriate U.S. Government and nonfederal parties. One of its projects is the development of a curriculum covering all aspects of technology transfer. The Center is working with NTIS to publish the next edition of the *Directory of Federal Laboratory and Technology Resources*.

15.10 PATENT LICENSING

First, two definitions. A **Patent** is a grant made by the U.S. Government to an inventor in return for a complete description or disclosure of an invention. This grant entitles the inventor to exclude others from making, using, or selling the invention in the United States for 17 years. After 17 years, the patent expires and the invention becomes public property. **Licensing** can be defined as the transfer of the right to use or manufacture a technology, i.e., patentable invention, in exchange for payment. Licenses do not usually involve the transfer of all the owner's rights. Payments, i.e., royalties, are commonly tied to the extent to which the technology is used or sold by the licensee, and thus are not fixed.

The first definition is from the *STI Handbook: Guidelines for Producing, Using, and Managing Scientific and Technical Information in the Department of the Navy*, published by the Naval Command, Control and Ocean Surveillance Center RDT&E Division. The handbook contains a chapter on intellectual property, including inventions and patents. The *AFSC Domestic Technology Transfer Handbook* contains a very detailed chapter on inventions, patents, and licenses and includes a number of paperwork samples.

Patent considerations are a major focus of DTT. The FTTA improved the transfer of commercially useful technologies by decentralizing the authority for entering into licenses to each federal laboratory. The Act simplified the process of granting licenses and established a system of royalty sharing for federal employee inventions.

According to the 1992 *NTIS Catalog of Products and Services*, more than 1,000 U.S. Government inventions are patented each year. These inventions can be licensed by U.S. and foreign businesses, on either an exclusive, partially exclusive, or non-exclusive basis and may include foreign rights. The licensee agrees to develop and/or market the invention. Patent licensing of U.S. Government inventions is handled by either the OFPL, that is located at NTIS, or the individual agencies and laboratories themselves. For example, DoD, DOE, and NASA conduct their own licensing.

The OFPL has existed approximately 20 years and became part of CUFT when the center was established. Its responsibilities include:

1. Screening inventions.
2. Conducting market analysis and marketing.
3. Distributing licensing revenues.
4. Collecting fees.

Some interesting facts:

1. OFPL placed its first license in 1976 and has had two significant successes since then.
2. Eighty licenses were placed in FY91. This was an 100% increase in ten years and is considered good.
3. It costs an average of half a million dollars to license a patent.
4. The experience of the OFPL confirms the following rule of thumb:

**1000 invention disclosures (documentation of discovery)
results in
100 patent licenses
results in
1 significant commercial success**

OFPL is losing two of its largest customers - National Institutes of Health and the Department of Agriculture - which will be conducting their own patent licensing. The Office will continue to license patents for such customers as the Department of Interior, EPA, and the Veterans Administration.

Patents are available from either the U.S. Patent and Trademark Office or a patent vendor. All patents are available from the U.S. Patent Office for \$1.50 each. If an invention looks promising, the OFPL can tell you: a) what rights are still available concerning the invention and b) the office handling the negotiations for the licensing of the invention.

The licensing procedure can be thought of as an extension of the contracting process. If an invention has a number of parties interested in it, they are invited to submit a plan for developing the product or process and commercializing it. An applicant is selected based on the most advantageous, realistic, and expeditious plan. If the license is for exclusive rights to the invention, it must be published in the *Federal Register* 60 days before its granting.

The terms and conditions of patent licenses are a negotiated item. License agreements usually require an execution fee, annual minimum fees, and royalties based on sales resulting from the use of the invention.

15.11 HOW DOD HANDLES PATENT LICENSING

Individual DoD laboratories may enter into direct patent licensing agreements with individuals and companies. The Staff Judge Advocate Office handles all questions.

The following major points are taken from AR 70-57, *Military-Civilian Technology Transfer*, and should be similar to or the same as the other services:

1. The types of licenses that the Army grants are classified as either non-exclusive, partially exclusive, or exclusive. Non-exclusive licenses usually do not involve royalties, whereas exclusive or partially exclusive licenses normally will involve royalties or other considerations to the Government.
2. The granting of exclusive or partially exclusive licenses involves a number of restrictions and conditions, e.g., a notice of the prospective license in the *Federal Register* and a three month delay time to process objections.
3. The application for a patent license contains, in addition to the expected items, a detailed description of the applicant's plan for development or marketing of the invention.
4. The application will be denied if it is not in the interests of the public and Federal Government, and the granted licenses may be terminated for any breach of the license.

15.12 DOCUMENTATION

Major documents that support the DoD Domestic Technology Transfer program include:

1. AFR 80-27, *Domestic Technology Transfer*
2. AFR 83-1, *U.S. Air Force Scientific and Technical Information Program*
3. AFR 110-8, *Inventions, Patents, Copyright and Trademarks*
4. AFR 110-33, *Licensing Government-Owned Inventions in the Custody of the Department of the Air Force*
5. *American Technology Preeminence Act of 1991*, Public Law 102-245. U.S. Code, Title 15.

6. AR 27-60, *Patents, Inventions, and Copyrights*
7. AR 70-45, *Research, Development, and Acquisition Scientific and Technical Information Program (Draft)*
8. AR 70-57, *Military-Civilian Technology Transfer*
9. DoD 3200.12-R-4, *Domestic Technology Transfer Program Regulation*
10. *Catalog of Government Inventions Available for Licensing* (NTIS, 1991, PB92-100171CAU)
11. *Directory of Federal Laboratory and Technology Resources* (NTIS, 1990-91, PB90-104480CAU)
12. *Domestic Technology Transfer Handbook*, Air Force Systems Command, 1989
13. *Facilitating Access to Science and Technology*, E.O. 12591, April 10, 1987
14. *Federal Technology Transfer Act of 1986*, Public Law 99-502. U.S. Code, Title 15, Chapter 63
15. *NTIS Alert on Government Inventions for Licensing* (NTIS, Subscription)
16. OCNRINST 5700.1, *Navy Domestic Technology Transfer Program*
17. *Official Gazette of the U.S. Patent and Trademark Office*
18. SECNAVINST 3900.43, *Navy Scientific and Technical Information Program (STIP) (Draft)*
19. SECNAVINST 5700.16, *Domestic Technology Transfer*
20. *Small Business Guide to Federal R&D Funding Opportunities* (National Science Foundation)
21. *Stevenson-Wydler Technology Innovation Act of 1980*, Public Law 96-480. U.S. Code, Title 15, Chapter 63

16. LIAISON AND COORDINATION - OTHER

The following individuals, offices, and programs are discussed in this chapter:

- Data Management Office (DMO)
- DoD Information for Industry Program
- DoD Potential Contractor Program (PCP)
- Engineers, Scientists, and Program Management Offices
- Foreign Disclosure Policy Office (FDPO)
- Freedom of Information Act (FOIA) Program
- Information Analysis Centers (IACs)
- National Technical Information Service (NTIS)
- Public Affairs Office (PA or PAO)
- Small Business Innovation Research (SBIR) Program
- Staff Judge Advocate Office
- Technical Library
- Unit Command Structure

16.1 DATA MANAGEMENT OFFICE (DMO)

The Data Management Office, Data Manager, or equivalent is part of the contracting chain. Two of the DMO's responsibilities are to advise and assist project officers to help them complete the DD Form 1423, *Contract Data Requirements List (CDRL)*, and to monitor the technical data deliverables. The CDRL and the referenced *Data Item Description (DID)* are discussed in Chapter 9.

There are several major STINFO Manager responsibilities associated with the contracting process that require coordination with the Contracting and Data Management Offices. The STINFO Manager should:

- Ensure that STI reporting requirements are included in all relevant contracts by means of the CDRL.
- Include the CDRL as a source for the publication tracking system. The form identifies future STI publications.
- Ensure that contract deliverables are not accepted until the sponsor receives the camera-ready copies. AFR 83-2 states that controls should be established so that the DD Form 250, *Material Inspection and Receiving Report*, is not signed until camera-ready copies are received. The technical office, contracting officer, or other authorized person signs the form. The items are then passed to the STINFO office for processing. The items should be reviewed for completeness, adherence to standards, and other DID requirements before the DD Form 250 is signed.

16.2 DOD INFORMATION FOR INDUSTRY PROGRAM

DoD Instruction 5200.21, *Dissemination of DoD Technical Information*, states that planning and technical requirements information will be made available through Industry Information Centers so that industry can plan and apply its resources effectively.

The DoD-wide Information for Industry Program has the following eligibility requirements:

1. U.S. citizen possessing valid security clearance; representing an industrial, scientific, or other organization that has a current R&D contract with the U.S. Government; and the organization that the citizen works for is registered with DTIC.
or
2. The organization is registered for access to technical information through one of the Potential Contractor Programs (PCP).
and
3. The organization is not foreign owned or representing foreign interests during visits.

Implementing regulations include AFR 80-11 and AR 70-35.

The military services have established offices to provide planning and technical requirements information. The Air Force uses the term **Air Force Information for Industry Office (AFIFIO)**. The Army uses the term **Technical and Industrial Liaison Office (TILO)**. The Navy calls the office **Navy Acquisition, Research and Development Information Center (NARDIC)**.

**Think of an Information for
Industry Office as a Reading
Room for DoD Planning and
Requirements Information,
used by Contractors, and
Manned by a Helpful,
Knowledgeable Staff.**

Figure 44

The information at these Information for Industry Offices (IFIOs) supports and describes the research, development, and acquisition process from the Planning, Programming, and Budgeting System (PPBS) phases through to procurement actions. The IFIO collection includes advance planning and R&D requirements information and ranges from *Program Element Descriptive Summaries (PEDS)* to brochures, pamphlets, organizational charts, and anything else that describes “**how to do business with DoD**”. The collection does not contain actual contract-related information, e.g., Request for Proposals (RFPs), Request for Quotations (RFQs), contracts, bidders mailing lists. The military services use different names for some of their planning and requirements documents.

The collections at these offices include a large number of current classified and unclassified documents. Planning materials are considered ephemeral, and currency is important. It is the office manager’s responsibility to ensure that the collection is as current as possible, through either automatic distribution or direct contact with the offices generating these materials.

In order to use the services of an IFIO, an organization must first register to establish it has a need-to-know. The DD Form 1540, *Registration for Scientific and Technical Information Services*, is used for this purpose. The form is also used for registration under the Potential Contractor Program (PCP).

Visits are by appointment, and an individual must have a clearance on file in order to access classified materials.

AMC-P 70-6, *Research and Development Opportunities with the U.S. Army Materiel Command*, is a good introduction to the Information for Industry Program. A copy of the pamphlet and a list of current DoD-wide IFIOs are found in the STINFO Documentation binder of your training material.

16.2.1 STINFO MANAGER RESPONSIBILITIES

The STINFO Manager assists the IFIO in a number of ways:

- Refers contractors to the IFIO.
- Informs the IFIO of planned technical meetings, e.g., Advanced Planning Briefings for Industry (APBI), at the local activity. This function should be part of the procedures for processing meeting requests.
- Assists in the evaluation of PCP requests. The IFIO manager may need input from your organization concerning the validity of a PCP request.
- Submits literature of interest published by your activity to the IFIO. This includes annual reports, brochures, planning documents, etc.
- Promotes the IFIO service in training and STINFO materials.

16.3 DOD POTENTIAL CONTRACTOR PROGRAM (PCP)

The DoD Potential Contractor Program (PCP) was established to provide eligible non-U.S. Government organizations with controlled access to DoD scientific and technical information, including planning requirements and the results of RDT&E efforts. Under this program, DoD sponsors a potential contractor with access to materials at an Information for Industry Office (IFIO) and DTIC.

An organization is eligible for the program if:

1. It is a non-U.S. Government organization that is not foreign owned, controlled, or influenced.
2. It has demonstrated the capability to perform R&D.
3. It has the intent and reasonable potential to eventually receive a contract from DoD.

Participation requires registration. A registration or application package consists of:

1. Instructions
2. Policy Agreement
3. DTIC registration information

The policy agreement indicates that the organization agrees to handle the information supplied by DoD in accordance with the terms of the policy statement. DTIC registration involves a number of forms depending on level of desired information access. The organization is also expected to submit evidence of its R&D capabilities in order to establish the organization's subject area need-to-know. This includes references to U.S. Government personnel who can confirm what is submitted; descriptions of previous contracts or subcontracts; and references to independent R&D projects. In the case of an organization that has never had a U.S. Government contract, resumes, publication lists, etc., can be submitted.

The PCP focal point or coordinator reviews the submitted information. He or she coordinates the completion of the required DTIC registration forms. Copies are forwarded to the organization. A certified copy of the policy agreement is also forwarded to the organization. If access to classified information is appropriate, DD Form 254, *Contract Security Classification Specification*, is completed by the PCP focal point and submitted to the Defense Investigative Service (DIS) for processing.

Agreements are in effect for three years.

Army Potential Contractor Program: Standing Operating Procedure for APCP Coordinators is an AMC pamphlet containing information on the Army PCP program. A copy of the pamphlet and a list of the current DoD-wide PCP focal points or coordinators are found in the STINFO Documentation binder of your training material.

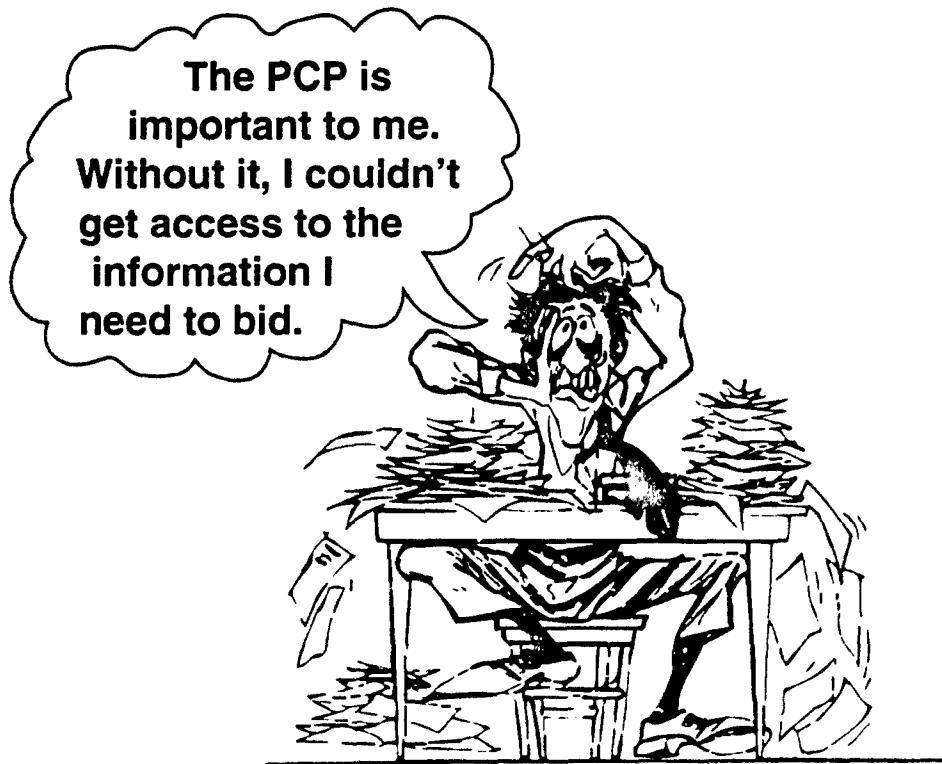


Figure 45

16.4 LOCAL ENGINEERS, SCIENTISTS, AND PROGRAM MANAGEMENT OFFICES

The STINFO office performs a number of duties to support the needs of the local engineers, scientists, and program management offices. Some of these duties are:

1. Training and promoting STINFO requirements, services, and procedures.
2. Information support including access to DTIC and other services.
3. Technical meeting guidance.
4. Expedited processing of all publications.

These duties are discussed in other chapters of this training manual.

16.5 FOREIGN DISCLOSURE POLICY OFFICE (FDPO)

KEY POINTS

- National Disclosure Policy rules for Classified Military Information (CMI) are contained in NDP-1, *National Policy and Procedures for the Disclosure of Classified Military Information to Foreign Governments and International Organizations*.

- The National Disclosure Policy Committee (NDPC) is the central U.S. Government authority for the formulation, promulgation, administration, and monitoring of NDP-1. It is composed of the Secretaries of State, Defense, Army, Navy and Air Force; the Chairman, Joint Chiefs of Staff; Director of Central Intelligence; etc.
- All requests for STI, i.e., CMI and Controlled Unclassified Information (CUI), from foreign representatives are handled by the FDPO.
- The **Foreign Disclosure Technical Information System (FORDTIS)** is an automated reporting system that assists in the review, coordination, and decision making concerning the foreign release of CMI and technology. All approvals and denials for CMI foreign disclosure are reported to the FORDTIS, while CUI reporting is encouraged.
- NDP-1 is implemented in DoD by DoD Directive 5230.11, *Disclosure of Classified Military Information to Foreign Governments and International Organizations*, and DoD Instruction 5230.20, *Visits and Assignments of Foreign Representatives*. Service implementing regulations are: AFR 200-9, AR 380-10, OPNAVINST 5510.48, and SECNAVINST 5510.26B.
- Delegation of Disclosure Authority Letters (DDLs) establish guidelines and provide authority for foreign release by FDPOs.
- The STINFO Manager should:
 - Know who has been assigned FDPO responsibilities and where the FDPO is located and be alert to foreign disclosure situations involving personnel at the organization. Examples include foreign participation in technical meetings, visits by foreign representatives, and any work-related foreign travel.
 - Refer all foreign requests for STI to the FDPO.
 - Know that the FDPO has the authority (and the practical need) to reword distribution statements in special situations.

According to the National Disclosure Policy, information is a national security asset which must be conserved and protected. Military information is under the control of DoD and its departments and requires protection in the interest of national security. The sharing of information with a foreign representative is termed **Foreign Disclosure** and refers to the authorized transfer of military information to a foreign government or international organization such as NATO, etc.

Normally, U.S. classified military information is provided only to officials of the U.S. Government and to U.S. defense contractors who have: a) the proper security clearance and b) a need-to-know the information to do their job. This same information may be shared with a foreign government or international organization only in certain situations.

There are five policy objectives or criteria that must be satisfied before disclosure will be approved:

1. Disclosure must be consistent with U.S. foreign policy toward the recipient nation or organization.
2. The disclosure must not seriously jeopardize the military security of the U.S.
3. An assessment of the foreign recipient's ability to give the information substantially the same degree of security protection that we give it must be made.
4. The benefits the U.S. gains as a result of the disclosure must be at least equivalent to the value of the information disclosed.

5. The information to be provided must be limited only to that which is necessary to accomplish the purpose of the disclosure.

The Secretaries of the three military services have the authority to disclose or deny access to U.S. classified military information originated within their respective departments. Delegated disclosure authority to the lower levels is disseminated in the form of **Delegation of Disclosure Authority Letters (DDALs)**. The FDPO has overall responsibility to implement foreign disclosure policies and procedures and to arrange for the authorized release of military information to foreign governments, international organizations, etc.



Figure 46

16.6 THE FREEDOM OF INFORMATION ACT (FOIA)

KEY POINTS

- The FOIA is the legal channel that controls public access to U.S. Government records.
- FOIA requests are processed by the FOIA Manager, the FOIA Monitor, and the Office of Primary Responsibility (OPR) for the requested records. The Staff Judge Advocate assists in the review.
- FOIA requests for unclassified technical data subject to export control may be denied by citing the third exemption to mandatory disclosure. The requester is referred to DoD Directive 5230.25, *Withholding of Unclassified Technical Data from Public Disclosure*, for access by qualified U.S. contractors through certification.
- There are many records exempt from FOIA release.
- The FOIA is implemented in DoD by Directive 5400.7, *DoD Freedom of Information Act Program*, and the procedures found in DoD 5400.7-R. Service implementing regulations are: AFR 12-30, AR 25-55, and SECNAVINST 5720.42D.
- The STINFO Manager has no direct responsibility in the FOIA process but should assist the FOIA Manager, as necessary, in the processing of FOIA requests. The STINFO office may serve as the designated OPR for specific documents.

16.6.1 WHAT IS THE FOIA?

Public access to government information has long been an issue in the United States. In 1966, Congress passed the *Freedom of Information Act (FOIA)* to broaden public access to U.S. Government records. The Act was amended in 1974 to remove obstacles that had been erected since 1966 and amended, again, in 1984 to limit access to certain CIA records.

The 1966 Act requires executive agencies to make records available to the public (U.S. or foreign citizens) who request them unless the material falls into one of the following exempt record categories:

1. Classified information (a classification review may be undertaken to determine whether the information should be classified).
2. Internal personnel practices.
3. Information exempted by statute, e.g., patent secrecy order, export-controlled technical data.
4. Trade secrets and other confidential commercial or financial information.
5. Intra- or inter-agency memos.
6. Personnel or medical files, as well as similar personal information in other files.
7. Information compiled for law enforcement purposes.
8. Information relating to examination, operations, or conditions of financial institutions.
9. Geological and geophysical information and data (including maps) concerning wells.

Exempt categories eight and nine do not apply to DoD. Requests falling under one of these nine categories can be denied.

In 1974, Congress passed a large number of amendments to the FOIA, mainly to remove some of the common obstacles encountered during the original FOIA process. Some of these amendments are:

1. Required federal agencies to publish indexes of final opinions on FOIA requested materials and to supply annual FOIA summary reports to Congress.
2. Required release in cases where the request contained only a description of the materials, as opposed to the exact title.
3. Required agencies to establish uniform fees and to publish them. Most agencies waive fees under a certain dollar amount, usually around \$30. (DoD 5400.7-R states that fees shall be waived if total costs for a FOIA request total \$15 or less.)
4. Set time limits for responding to requests. (DoD 5400.7-R states ten working days from receipt of request.)
5. Amended the wording of the security exemption to make it clear that it applies only to properly classified information.

16.6.2 EXAMPLES OF EXEMPT MATERIALS

Information itself is not covered by the FOIA. The information has to be a "tangible" agency record. Agency records are defined as the product of data compilation, such as all books, papers, maps, photographs, machine readable materials, and other documentary materials, regardless of physical form or characteristics, made or received by an agency of the U. S. Government under federal law in connection with the transaction of public business and in (DoD's) possession and control at the time the FOIA request is made.

Some specific examples of exempt documents are:

1. Publications containing proprietary information. This covers documents containing trade secrets and commercial or financial information submitted to DoD with the understanding that the information would be kept on a privileged or confidential basis. This includes contractor cost and technical proposals.
2. Information from personnel or medical files.
3. All classified information.
4. Unclassified technical data subject to export control. Qualified U.S. contractors may have access to this data through certification only.
5. Pre-decisional information which contain advice, evaluations, or recommendations. The disclosure of this information would reveal the deliberative process of DoD.
6. Requests received from foreign representatives, such as foreign governments, foreign nationals, or international organizations. These are forwarded to the Foreign Disclosure Policy Office for processing.
7. Any records containing information relating to inventions that are the subject of patent applications on which patent secrecy orders have been issued.

Requests for unclassified, unlimited military publications are considered FOIA requests. However, the requester should be referred to either NTIS or GPO.

16.6.3 FOIA REQUEST PROCESSING

The processing of FOIA requests involves the:

1. FOIA Manager, who serves as the focal point for FOIA requests received by the organization and manages the program.
2. FOIA Monitor, who actually processes the requests.
3. Office of Primary Responsibility (OPR), who controls the requested material.

The FOIA Manager receives and logs in all FOIA requests. The FOIA request is forwarded to the appropriate FOIA Monitor. If the request involves foreign disclosure, it is passed on to the Foreign Disclosure Policy Office (FDPO). The FOIA Monitor determines the OPR for the requested material and forwards the request to that office. The OPR, with help from the Staff Judge Advocate, determines whether the material should be released. The FOIA package (paperwork and material) is completed by the OPR, with the assistance of the FOIA Monitor, and returned to the FOIA Manager. The FOIA Manager sends the requested material to the requester, collects fees, and prepares various reports. If the request is denied, the requester is informed of the reason for denial and the appeal rights.

16.7 INFORMATION ANALYSIS CENTERS (IACS)

KEY POINTS

- DoD supports the establishment of IACs under the STIP. The governing regulation is DoD3200.12-R-2, *Centers of Analysis of Scientific and Technical Information Regulation*.
- IACs have been serving the defense community for over 40 years. DoD currently supports 23 IACs with technical monitors from all three services and two defense agencies. DTIC administers 14 of these.
- AFR 83-1 requires the STINFO Manager to monitor the operation of IACs that are supported by the local organization. Chapter 7 of AR 70-45 provides guidance on the operation of Army IACs.
- The STINFO Manager should:
 - Become familiar with the operations of any IACs supported by the local activity.
 - Monitor the IAC to ensure that it is handling its information properly. An IAC produces and distributes publications and sponsors technical meetings. These functions must meet all STINFO program requirements and procedures.
 - Ensure that DTIC handles secondary distribution of IAC-originated documents, if required.
 - Include IAC information in user training and STINFO materials.
- DTIC provides microfiche copies of IAC-originated documents published after 17 January 1985 that have citations in the Technical Report database on DROLS.

A large number of formal (federally funded and usually contractor-operated) and informal (locally funded and usually in-house) IACs exist. They vary in type of services rendered and in size, from small, one person operations to operations involving 30 or more people. Of the 23 DoD-supported IACs, 14 are contractor-operated, and nine are managed by DoD activities. DTIC administers and funds the 14

contractor-operated IACs. There are a number of IACs that are not yet under the DoD umbrella. One of these is the Supportability Investment Decision Analysis Center (SIDAC), which is operated by the Air Force.

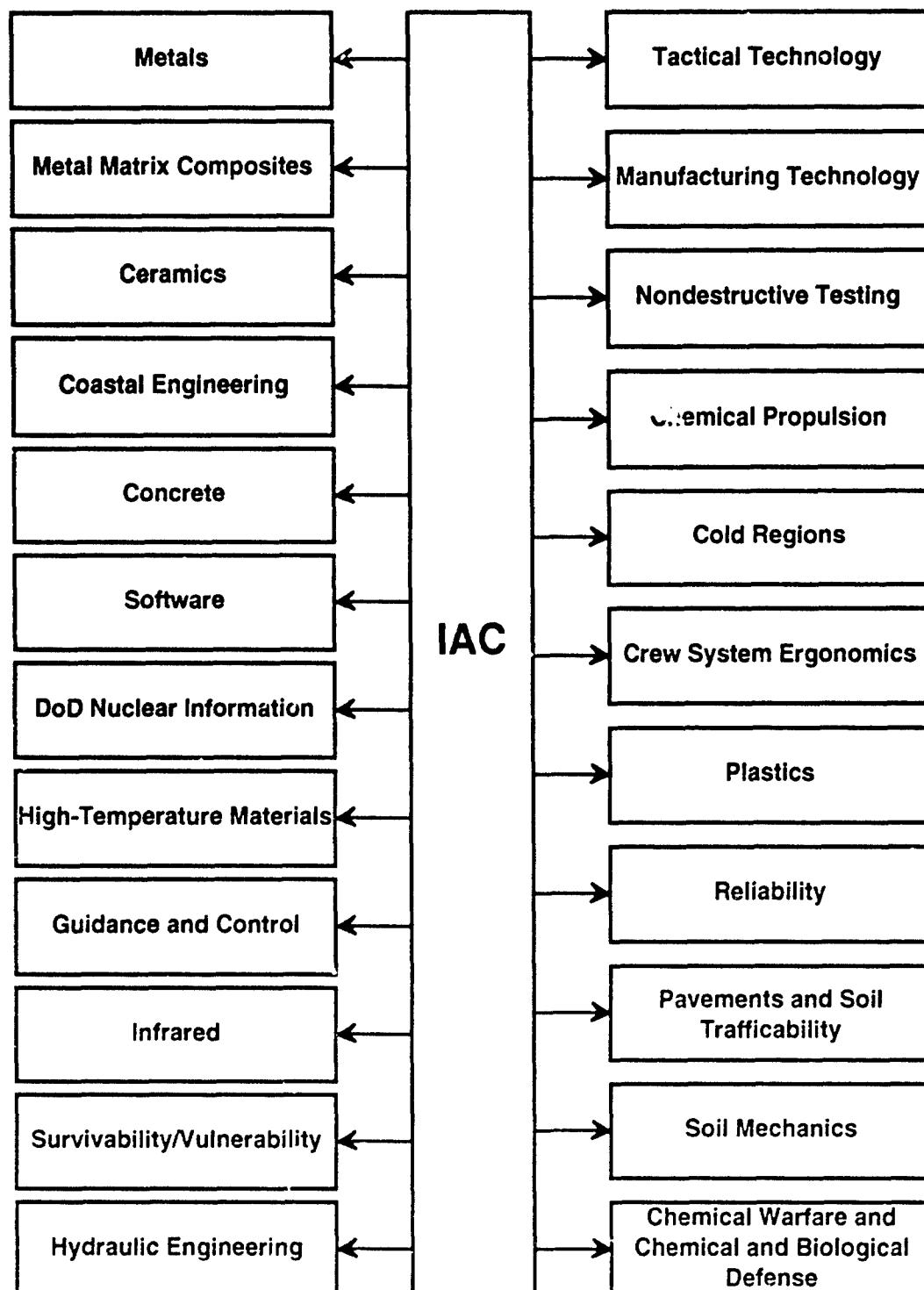


Figure 47 - IAC Areas of Expertise

The following organizations are eligible to use the IACs:

1. U.S. Government organizations.
2. U.S. Government contractors and grantees.
3. Private sector to the extent practicable without impairing service to DoD and consistent with security and other limitations placed on release of information.

To offset costs incurred in preparing materials or responses, service charges are imposed on products and services. These costs are established according to guidance provided by the sponsoring DoD component. Some IAC services are free or have a minimal charge, and the price range is wide. Charges are not incurred without the explicit agreement of the customer.

16.7.1 WHAT DOES AN IAC DO?

An IAC collects, reviews, analyzes, appraises, summarizes, and stores available information on subjects within highly specialized technical areas of concern. IACs differ from documentation centers, e.g., DTIC and libraries, in that the latter activities are primarily interested in the handling of documents rather than the technical content of documents. Subject coverage at an IAC has greater depth and breadth than is possible from DTIC. Figure 48 identifies some of the sources of the information collected by IACs.

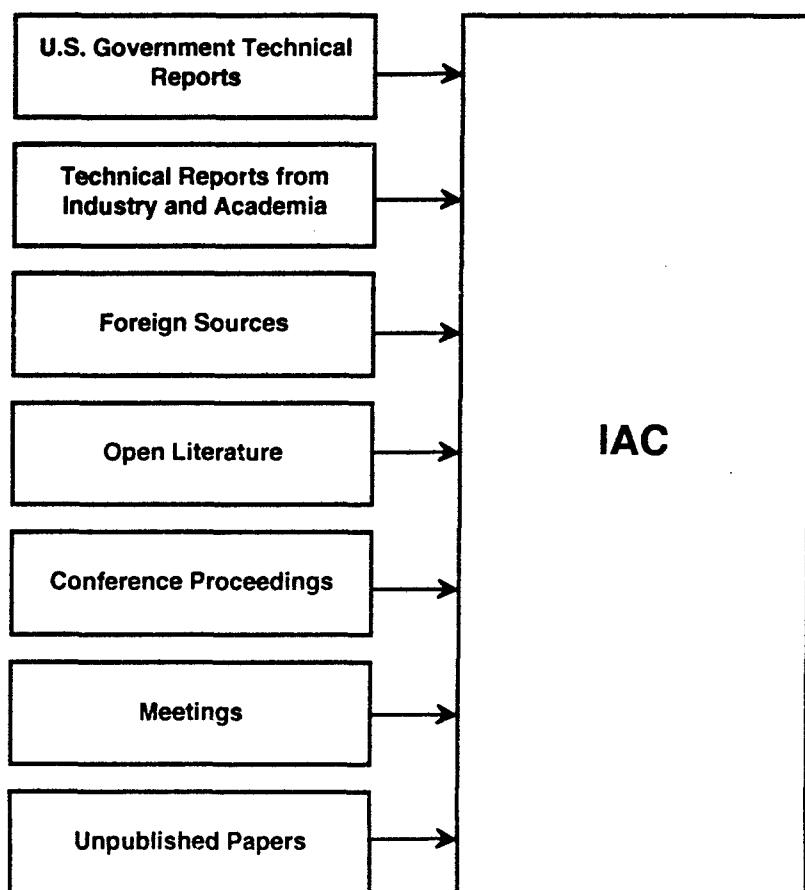


Figure 48 - IAC Source Material

Each IAC is concerned with a clearly defined subject matter, which may be either **discipline-oriented** (covering a clearly defined part of a technical discipline, e.g., NTIAC) or **mission-oriented** (requiring an interdisciplinary approach, e.g., SURVIAC). Figure 47 identifies the subject areas of the 23 DoD-supported IACs.

Some IAC functions are:

1. Gather information from the world's published and unpublished sources on the topic of interest.
2. Organize the relevant information into collections of materials and bibliographic databases.
3. Evaluate the information collected. These evaluations take the form of comparisons, technology assessments, state-of-the-art reports, and other summaries.
4. Answer specific questions concerning the technology and provide referrals to individuals who have expertise within the technology area.
5. Provide custom bibliographic searches and other custom information-related services concerning the field.
6. Provide administrative and technical support to conferences and joint committees DoD.

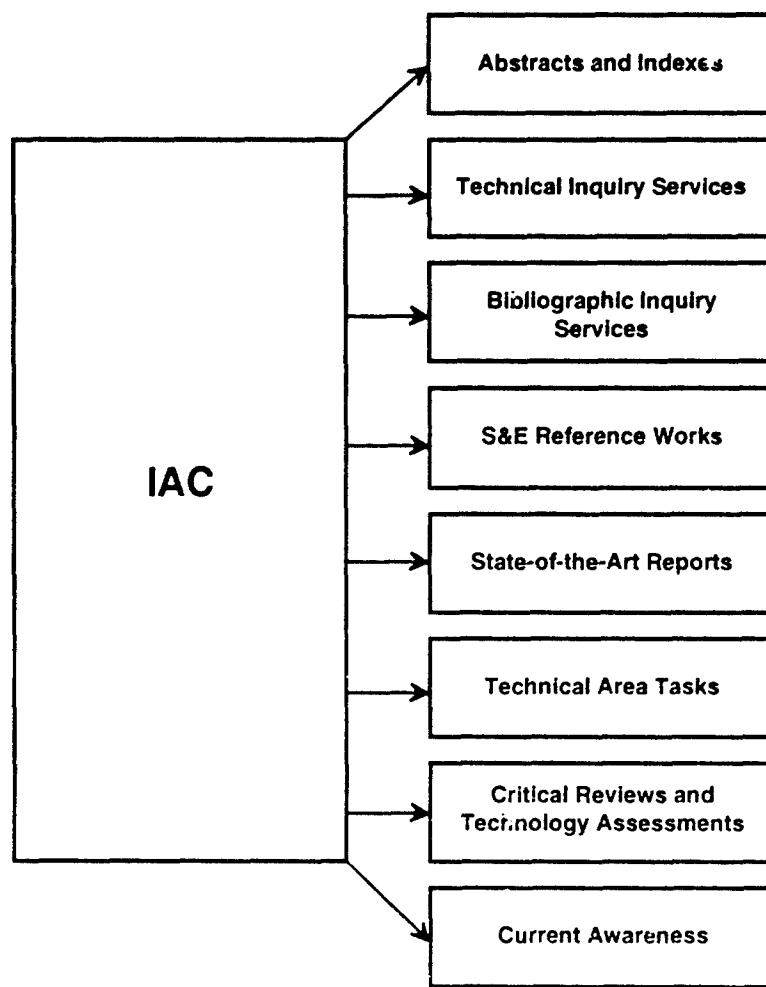


Figure 49 - Typical IAC Products

16.7.2 RELATIONSHIP BETWEEN IACS AND DTIC

The DTIC IAC program has been operating since 1980 and currently manages and funds 14 IACs. The address of the DTIC Program Manager is:

Administrator Defense Technical Information Center
ATTN: DTIC-AI
Cameron Station
Alexandria, VA 22304-6145
(703) 274-6260 or DSN 284-6260

Registration with DTIC establishes eligibility for IAC services, and registration is necessary if users want access to classified and limited documents.

Most DoD IACs enter citations to their documents into DTIC's TR database on DROLS. As a result, you will find citations to IAC-originated documents and other documents in their collections in the TR database, with assigned numbers in the AD-D numbers. IACs make secondary distribution only on their originated documents. Some of the documents in the IAC collections are acquired by DTIC and have DTIC-assigned AD numbers. DTIC provides microfiche copies of IAC-originated documents published after 17 January 1985 that have citations in the Technical Report database on DROLS. Paper copies are only available from the respective IACs.

16.7.3 FINDING AIDS

Some finding aids are:

1. *DoD Information Analysis Centers Directory*. This booklet contains profiles of all the DoD IACs. It is published by DTIC on a regular basis.
2. *Information Analysis Centers in the Department of Defense*. This is an in-depth report on IACs. The latest edition is AD-A184 002, published in 1987.
3. *Directory of Federal Laboratory and Technology Resources*. The directory lists information about the more well-known IACs and is available from NTIS.

16.7.4 MAJOR IAC STUDY

The Institute for Defense Analyses has completed a three-year review and evaluation of the DoD Information Analysis Centers program. The study focused on two principal questions:

1. **Do DoD components and DoD contractors benefit from their use of DoD IACs, and if so, can such benefits be quantified?** It was found that benefits could be quantified in many instances. In those cases where both quantified cost and benefit data were available or calculable, the benefit/cost for the IAC program as a whole exceeded a ratio of 4 to 1. In many cases, it proved impossible to quantify benefits, but it was possible to categorize them in a systematic fashion.

2. If DoD components and DoD contractors are benefiting from use of IACs, can changes in policy, procedures, and operations be made to increase the benefits that accrue as a result of IAC use? It was found that there are certain policies, government contract administration, and management procedures, and IAC operations that, if changed, might result in an increase in the number of DoD components and contractors able to benefit from IAC use.

Findings reported in several earlier IDA publications are also summarized.

The titles in the report series are:

1. Frank, Forrest R., and Townsley, Edwin S. *Evaluation of DoD Information Analysis Center Program: Pilot IAC Study*. IDA Memorandum Report M-433, December, 1988. AD-B136 397.
2. _____; _____; and Berkhouse, Linda K. *Evaluation of DoD Information Analysis Centers Program: Representative Sample Study - Benefits to DoD from Use of DoD Information Analysis Centers*. IDA Paper P-2302, June, 1990. AD-A226 983.
3. _____; _____; _____. *Evaluation of DoD Information Analysis Centers Program: Representative Sample Study - IAC Program Administration, Management and Oversight*. IDA Paper P-2419, June, 1990. AD-B148 109.
4. _____; Berkhouse, Linda K; and Markov, David R. *Evaluation of DoD Information Analysis Centers Program: Broad Sample Study. Volume I - Benefits from Nine IACs*. IDA Document D-813, August, 1990. AD-B154 520.
5. _____; _____; _____. *Evaluation of DoD Information Analysis Centers Program: Broad Sample Study. Volume II - Administration, Management and Oversight of Nine IACs*. IDA Document D-813, August, 1990. AD-B154 261.
6. _____. *Evaluation of DoD Information Analysis Centers Program: Final Project Report*. IDA Document D-881, November, 1990. AD-B154 523.

16.8 NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

National Technical Information Service

Springfield, VA 22161

(703) 487-4600

KEY POINTS

- NTIS is the single largest source of U.S. Government R&D information available to the public.
- NTIS is now selling military publications, e.g., DoD directives, Army technical manuals, regulations.
- There is no direct relationship between the STINFO program and NTIS. However, the STINFO Manager should know:
 - What NTIS is and what products and services are available from it.
 - That the STINFO Manager may be listed as the POC in the *Directory of Federal Laboratory and Technology Resources* published by NTIS.

- That NTIS handles all billing for access to DTIC. An NTIS deposit account should be opened for that purpose.
- That DTIC distributes all unclassified/unlimited (Distribution Statement A) documents to NTIS. It is not your responsibility to distribute directly to NTIS.

The 1992 *Catalog of Products and Services* states that NTIS offers:

- Easy-to-read summaries and complete reports of U.S. and foreign government R&D, engineering, and business activities.
- Applications software, datafiles, and databases produced by federal agencies.
- More than 100,000 descriptions of ongoing U.S. Government-sponsored research projects.
- Licensing of U.S. Government-owned inventions with good market potential.
- Convenient online access to the 1.6 million item NTIS database.

This says it in a nutshell. NTIS is a large, diverse organization that serves as a repository, organizer, and secondary distributor for the material it collects. The major suppliers to NTIS are DoD, DOE, and NASA.

The NTIS collection contains approximately 2 million titles, and about 30% originate from foreign sources. Each week NTIS adds an average of 1,000 new titles to its collection and ships about 6 million items each year. All titles are permanently for sale. Since the agency does not stock all titles it sells, such as military publications, NTIS will order nonstocked titles as they are requested.

NTIS sells its products and services under the provisions of Title 15 of the *U.S. Code*, that not only established such a clearinghouse but directed it to be self-supporting. Therefore, its business costs are paid for from sales income, not from congressional appropriations. The *American Technology Preeminence Act of 1991* (P.L. 102-245) requires the head of each federal executive department or agency to transfer to NTIS in a timely manner unclassified STI resulting from federally funded R&D activities for dissemination to the private sector, etc.

There are two major bibliographic tools that can be used to access the NTIS collection. The first is the NTIS Bibliographic Database. It is available online from all of the major database vendors and is heavily used. The second one is the *Government Reports Announcements and Index*, that is issued twice each month and summarizes all the new titles added to the NTIS collection since the previous edition.

In addition to its role as a repository and distributor of technical information, NTIS has a number of programs that the STINFO Manager should be aware of. Some of these are:

1. An International Technology Acquisition program whereby NTIS tries to "exchange" access to the NTIS collection for access to materials from other countries.
2. Office of Federal Patent Licensing.
3. Federal Research In Progress (FEDRIP) Database, that is similar to the WUIS but not contributed to by DoD.
4. Joint Publications Research Service translations of foreign media and other publications.
5. Federal Computer Products Center that sells U.S. Government developed software and datafiles. The Federal Software Exchange Center no longer exists.

The *NTIS Catalog of Products and Services*, PR-827, is available free from NTIS. A copy of the latest catalog is included in the STINFO Documentation binder of your training material. A video entitled *NTIS - The Competitive Edge* is available complimentary. It is an 8-minute overview of NTIS and its activities.

16.8.1 RELATIONSHIP BETWEEN NTIS AND DTIC

All of the information available from NTIS is unclassified/unlimited (Distribution Statement A) and is, therefore, available to the public, including foreign requesters. DTIC distributes all the unclassified/unlimited documents it receives to NTIS, which will sell the documents to the public. It is not the STINFO Manager's responsibility to distribute documents directly to NTIS.

NTIS handles all billing for access to DTIC. An NTIS account should be opened for that purpose.

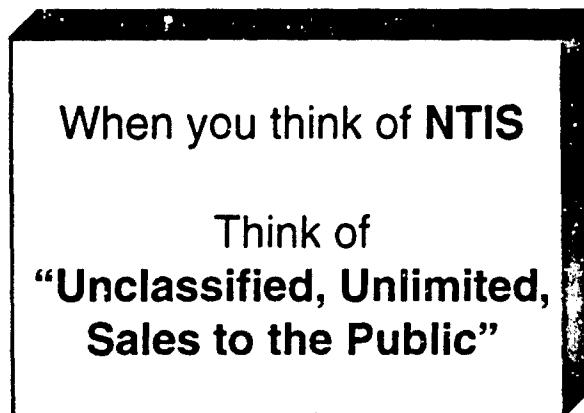


Figure 50

16.9 PUBLIC AFFAIRS OFFICE (PA OR PAO)

KEY POINTS

- DoD Directive 5230.9, *Clearance of DoD Information for Public Release*, establishes policy and procedures for conducting the **Security and Policy Review**. Implementing regulations are: AFR 190-1, AR 360-5, and SECNAVINST 5720.44A.
- The STINFO Manager should:
 - Ensure that all STI proposed for public release, i.e., Distribution Statement A, are reviewed and cleared by the PAO.
 - Become familiar with PAO processing requirements, e.g., necessary forms, and number of copies required to ensure documents are processed smoothly and quickly.
 - Know that the PAO tries to clear a document at the lowest level, but certain classes of information automatically require review at a higher level and therefore, a longer review process. DoD Directive 5230.9 lists the information categories that require clearance by the Assistant Secretary of Defense (Public Affairs), Directorate for Freedom of Information and Security Review.

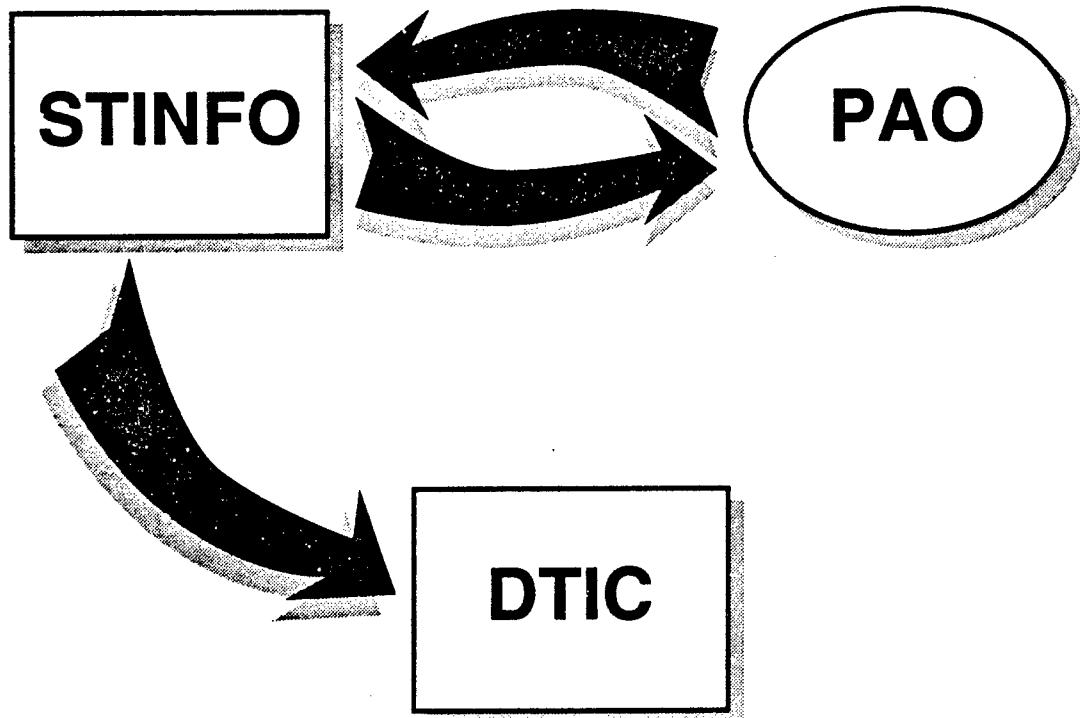


Figure 51 - Statement A Documents

The Public Affairs program is an on-going effort to inform and increase the public understanding about the missions and programs of DoD. The **Security and Policy Review** is a service performed by Public Affairs personnel to ensure that information is technically accurate, published in an unclassified form, released quickly, and conforms to established policies and programs. All release controls must be adhered to.

The review of information prior to public release is called the **Security and Policy Review**. It is applied to all technical information, regardless of type, format, or characteristics, that is being considered for Distribution Statement A: Approved for Public Release; Distribution is Unlimited. The **Security Review** ensures that the material does not contain classified information, while the **Policy Review** determines that the material is consistent with established DoD and other U.S. Government policies and programs.

The terms **Clearance** and **Release** are separate concepts that can be easily confused. **Clearance** refers to the process of review for releasability, and **Release** refers to the actual dissemination of information to the public. Release includes all means of possible communication, e.g., speeches, papers given at symposia and conferences with public attendance, news releases, and even letters.

The review begins with the submission of material to the cognizant PAO. It is logged in, given a quick check by the reviewer, and in most cases sent to one or more appropriate organizations for comment.

After receiving comments on the material, the reviewer either: a) clears the material as is; b) clears the material with recommended changes; c) forwards the material for higher headquarters review; or d) denies the clearance. The PAO tries to clear a document at the lowest possible level. If clearance is denied, the reviewer is required to return the material to the originator with an explanation that states why clearance was not granted.

16.10 SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM

KEY POINTS

- The DoD SBIR Program is coordinated through:

The DoD SBIR Program Coordinator
Office of Small and Disadvantaged Business Utilization
Room 2A 340, The Pentagon
Washington, DC 20301-3061
(703) 697-1481

- There is no direct relationship between the STINFO program and SBIR, but the STINFO Manager should know that:
 - Work unit summaries should be submitted to the WUIS database within 30 days after the initiation of the project.
 - His or her organization contributes to the SBIR program solicitation through document citations in a Technical Information Package (TIP) prepared by DTIC.
 - Results from SBIR efforts are STI material. SBIR publications are handled in the same way as other contractor-generated STI that contain proprietary information. Final reports should be submitted to DTIC.
 - Beginning with the 92.2 solicitation, one copy of each final report on SBIR Phase I projects is to be sent to DTIC by the contractor, normally due within 30 days after the effort has been completed.

16.10.1 WHAT IS SBIR?

The *Small Business Innovation Development Act* was passed by Congress in 1982 to stimulate U.S. productivity and economy through increased technological innovation. The Act provides a mechanism the U.S. Government can use to solicit small businesses for a portion of its needs for technology. Originally, the Act which was to last for five years, was to end in 1988. The Act was extended an additional five years. The Act was reauthorized in 1992 and will expire October 1, 2000. The program has been extremely successful.

Beginning in FY83, federal agencies with R&D budgets in excess of \$100M per year began to allocate set percentages of these funds for SBIR programs. The 1992 reauthorization increased the set-aside from 1.25 percent to an incremental increase of 1.5 percent in FY93 to 2.5 percent in FY97 and thereafter. The 1993 Defense Authorization Bill calls for DoD SBIR funding at 2.5 percent effective in FY93.

The opportunity to compete for DoD funds takes the form of two semi-annual SBIR solicitations. These solicitations and the ones from other federal agencies are coordinated by the Office of Innovation, Research and Technology, Small Business Administration, Washington, DC 20435, (202) 653-6458. This office also issues quarterly release schedules for all agency solicitations under this program.

16.10.2 HOW THE SBIR PROGRAM OPERATES

Under the law, the SBIR program operates as a three-phase process.

PHASE I is based on proposals solicited by participating agencies. These solicitations contain hundreds of topics on which small firms are invited to submit proposals during two solicitation periods, one of which is 60 days and the other 90 days. PHASE I winners are awarded contracts which average \$50,000 to complete a six month proof of concept effort. The 1992 reauthorization increased the award ceiling to \$100K and the time period for the effort to one year.

PHASE II is an R&D effort with a duration of around two years. Most Phase II awards are between \$200,000 and \$500,000. The 1992 reauthorization increased the award ceiling to \$750K. Awards for Phase II work are based on the results of Phase I efforts and the scientific and technical merits of Phase II proposals.

PHASE III is conducted by the small business to pursue commercial application of the results of Phase II efforts. This phase allows the business to pursue commercial applications of the work started in Phase I and II and to seek non-federal funding.

In FY 84, DoD evaluated 3,007 proposals submitted under this program, of which 397 were actually funded for an average amount of \$54,000. The total amount of Phase I contracts was slightly over \$20 million dollars, an amount approximately equal to the total Phase II awards. This has grown to 1,247 funded Phase I awards out of 11,610 proposals in FY91 with a total contract award amount of about \$65 million. DoD contracts represent slightly under half the total U.S. Government program. During the FY92 solicitations, DoD had a total of 813 topics for bid, and DTIC supplied 28,244 TIPs and 10,631 technical documents.

16.10.3 RELATIONSHIP BETWEEN SBIR AND DTIC

DTIC SBIR Office

(703) 274-6902, DSN 284-6902, (800) 225-3842

There is a special relationship between the SBIR program and DTIC. Potential bidders need DoD technical information to respond to the solicitations. DTIC prepares a Technical Information Package (TIP) for each topic listed in DoD solicitations and provides them to small businesses at their request.

A TIP consists of a topic-related bibliography of the unclassified, unlimited technical documents in the DTIC collection and a listing of research in progress from the WUIS database. Referrals to IACs and other sources of technical information are also included in the package. Also, the small business may request the documents cited in these bibliographies and receive the first ten at no cost to the small business. These bidders are placed in a special DTIC user category similar to participants in the Potential Contractor Program. This category is upgraded as contracts are awarded.

16.11 STAFF JUDGE ADVOCATE OFFICE

Because the Staff Judge Advocate is responsible for an organization's legal needs, the STINFO Manager will interact with this office on a number of issues.

The Staff Judge Advocate is responsible for:

- Giving advice and guidance on the release or denial of FOIA requests.
- Handling all patent-related issues, such as licensing and negotiating Cooperative Research and Development Agreements (CRDAs).
- Other issues such as contractor rights statements, copyright questions, certified contractor disqualification, etc.

16.12 TECHNICAL LIBRARIES

The technical library is the major source of information in an organization and is responsible for providing needed materials and services pertinent to the purpose and work of the organization.

Technical libraries offer highly specialized and personalized services for their user population; provide quick access to and retrieval of information; contain collections that are topical and organized to be responsive to their particular activity's mission; and make intensive use of interlibrary loan, commercial databases, and specialized databases to supplement their basic collections.

The technical library provides the following basic information services:

1. Collection building, preservation, and archiving:

Books	Maps	Reference Material
Government Documents	Newspapers	Special Collections
Journals	Nonprint Material	Technical Reports

2. Abstracting, indexing, cataloging, and circulation of materials

3. Reference Services

Bibliographies	Reader Advisory Service
Literature Searches	Translations

4. Information Counseling

The STINFO Manager and technical librarian have a number of responsibilities in common. They both provide scientific and technical information support, services, and resources for the organization. While the STINFO Manager oversees the program, the technical library plays a major role in STINFO activities and performs a number of the DoD STIP requirements, such as literature searching of the WUIS database and the maintenance of document collections.

AR 70-45 states that the STINFO Manager may also be the librarian. In many DoD activities, the STINFO Manager is the librarian or the library is in the same organizational alignment. If the positions are separate, the STINFO Manager should work closely with the technical librarian to ensure that all aspects of the program are being carried out.

16.13 UNIT COMMAND STRUCTURE

In order to have a successful STINFO program, the manager must coordinate the program with the needs of the local administration. The local administration must be made aware that STI is one of their most important products, and sometimes the only product resulting from a work effort.

To support the needs of the local administration, the STINFO Manager should become a contributing member at regular staff meetings that involve discussing the technical activities of the organization. The STINFO Manager should prepare regular status summaries on the program's activities, as well as identifying specific problems and recommending actions to solve these problems.

17. MANAGEMENT OF THE STINFO PROGRAM

The STINFO Manager is responsible for running the STINFO program and its office. It is a reasonable expectation that your program and office are run in a professional manner and according to all DoD and service-specific regulations. A second reasonable expectation is that the STINFO Manager be the “primary point of contact” for all STI activities at the organization.

There are four specific managerial responsibilities:

1. **Oversee the program and ensure that all aspects are being carried out.** You are not responsible for performing all STI-related duties at the organization. You are, however, responsible for monitoring the program, including audits and inspections, to ensure that the program is functioning properly. An inventory of your organization's STI activities and resources and a publication tracking system will help you carry out this duty.
2. **Issue local written guidance on STINFO-related activities.** This includes local regulations, policy letters, procedures, etc. This guidance will help you oversee the program. For example, the Air Force requires a local supplement to AFR 83-1.
3. **Explore methods for improving STINFO systems and procedures on an ongoing basis.** Your goal is to review and seek to improve your program. The STINFO Program Manager should be informed of improvements so that other organizations may benefit.
4. **Provide training and promote your program to STI users and producers at your organization.** More on this in Chapter 18.
5. **Report on program participation.** You will need to collect, analyze, interpret, and submit data on the effectiveness of your program. For example, the Army recommends an annual written report.

17.1 STI ACTIVITIES AND RESOURCES INVENTORY

You should prepare and maintain an internal document describing all the STI activities and resources at your organization. It should include descriptions of all the information “centers”, all the information services subscribed to, and local STINFO-related regulations, policy letters, procedures, etc. You should keep this inventory up-to-date, as regulations change, new procedures are developed, new STINFO-related activities are added, or unused STINFO services are dropped.

This document has a number of obvious uses and will help you carry out the STINFO function. In addition, it will serve as the basis for the local *STINFO Users Handbook* and form the core of training sessions.

17.2 IMPROVING STINFO SYSTEMS AND PROCEDURES

Establishing policy, procedures, and other guidance is a main responsibility of the STINFO Manager. Each one of these actions should be examined on an ongoing basis to seek ways to make them more efficient and more responsive to the user community. One major system that should be examined closely and regularly is the technical publications program. For example, you should reexamine the processing procedures with the goal of decreasing the time between receipt of a draft and the primary distribution of the document.

17.3 ANNUAL REPORT ON LOCAL STINFO PROGRAM

On an annual basis, you should write a summary of the STI activities that took place during the ending fiscal year and submit the report to your local command structure and the STINFO Program Manager. The purpose of this report is to measure the effectiveness of the local STINFO program. This report should include summary statistics on the number of technical documents published and submitted to DTIC, documentation on the WUIS literature searches that were conducted, and the number of new and delinquent WUIS records, etc.

18. TRAINING USERS AND PROMOTING THE STINFO PROGRAM

KEY POINTS

- The STINFO Manager is responsible for conducting an indoctrination program for the users and producers of STI. This will require:
 - Preparing and distributing a STINFO Users Handbook.
 - Developing and refining a STINFO presentation.
 - Presenting a STINFO briefing as part of any new personnel orientation given to scientists, engineers, and related technical personnel.
 - Offering STINFO training on a regular basis.
 - Promoting the program by:
 - Issuing a local STINFO newsletter.
 - Preparing and presenting a “Command Briefing” whenever possible and appropriate.

18.1 PREPARING A LOCAL STINFO USERS HANDBOOK

A concise, useful *STINFO Users Handbook* should be the cornerstone of your indoctrination program. It should be given out during all training and orientation sessions, and if well written, will save you time in the long run.

The key questions to answer in this handbook are: a) what STINFO products and services are available and b) the requirements, standards, and procedures for generating STI products. Remember to:

1. **Make it short.** No one has time for long and wordy handbooks. The shorter it is, the more likely it is to be read and used.
2. **Make it current and accurate.** Engineers and scientists are constantly pressed to keep up-to-date, use the latest technology, etc., and are almost trained to ignore documents that are obviously out of date. If you want your handbook to be used, keep it current! As new services become available or are dropped, be sure to include them. Updated procedures should also be included.
3. Include a series of “**How to ...**” pages. Write the words “**How to:**” at the top of each page, and complete the phrase by indicating a specific action. Then list the steps that need to be completed to carry out the action.

Scientific and Technical Information (STINFO) Services at your Activity

What Information Services are
Available at your Activity.

How to get Access to Them.

How to Generate a Technical Report,
Give a Technical Paper, Sponsor
a Meeting, or Generate any other
Information Product.

Figure 52 - STINFO Users Handbook Cover

18.2 ORIENTATION PRESENTATIONS

One of the obvious places to conduct STINFO program indoctrination is at new employee orientations. You should: a) prepare a very short presentation that makes four or five key points at most; b) distribute your handbook; and c) make sure that each engineer and scientist knows how to get access to the STINFO services available at your location.

Since new employee orientations tend to be a blur (**do you remember yours?**), you should not try to make it a training session. Just try to make your audience aware that: a) there are policies and procedures to follow when generating STI and b) there are STINFO services available to support new and ongoing projects. If you get these two points across, you have succeeded.

18.3 LOCAL STINFO TRAINING

Every producer and user of STI should, at some point, be given training. However, a major problem is getting a busy engineer or scientist to take time to attend such a training session. A complete multi-hour training session at the STINFO site is simply not a very strong drawing card. Two alternatives to consider are: a) a series of short, very specific topic sessions and b) taking training directly to the specific offices that need it.

18.4 PROMOTING THE STINFO PROGRAM

Promotion is best served by conducting training sessions and distributing a *STINFO Users Handbook*. However, a regular STINFO newsletter and command briefings are two other promotional tools to consider.

A newsletter for STINFO users and producers can be an effective promotional and information tool. A short one-page or two-page newsletter is not difficult to put together. Also, consider writing a regular column in your organization's newsletter. If the local Director of Information Management (DOIM) issues an effective newsletter or there is a widely read installation newsletter, make use of them.

A STINFO newsletter should include such information as a listing of all recently published titles, all titles in process, new and changed policies and procedures, new services, and reminders of existing services and how to get access to them.

A key to having a successful newsletter is to not issue it too often. If you do, it becomes a burden to produce and won't contain enough new material to be worth reading. However, a regular newsletter produced at a wide interval, such as every two months, is better than an irregularly produced newsletter. A newsletter published irregularly tends to get produced less frequently as time goes by until it fades into the sunset. The self-imposed deadline of a regular publication tends to keep one going.

You should also prepare a standardized "Command Briefing" about STINFO services and use it to promote your program. Such a briefing can be announced and given independently. However, if it is given as part of another set of briefings, you will reach a larger audience. You should actively seek opportunities to give your briefing at appropriate occasions.

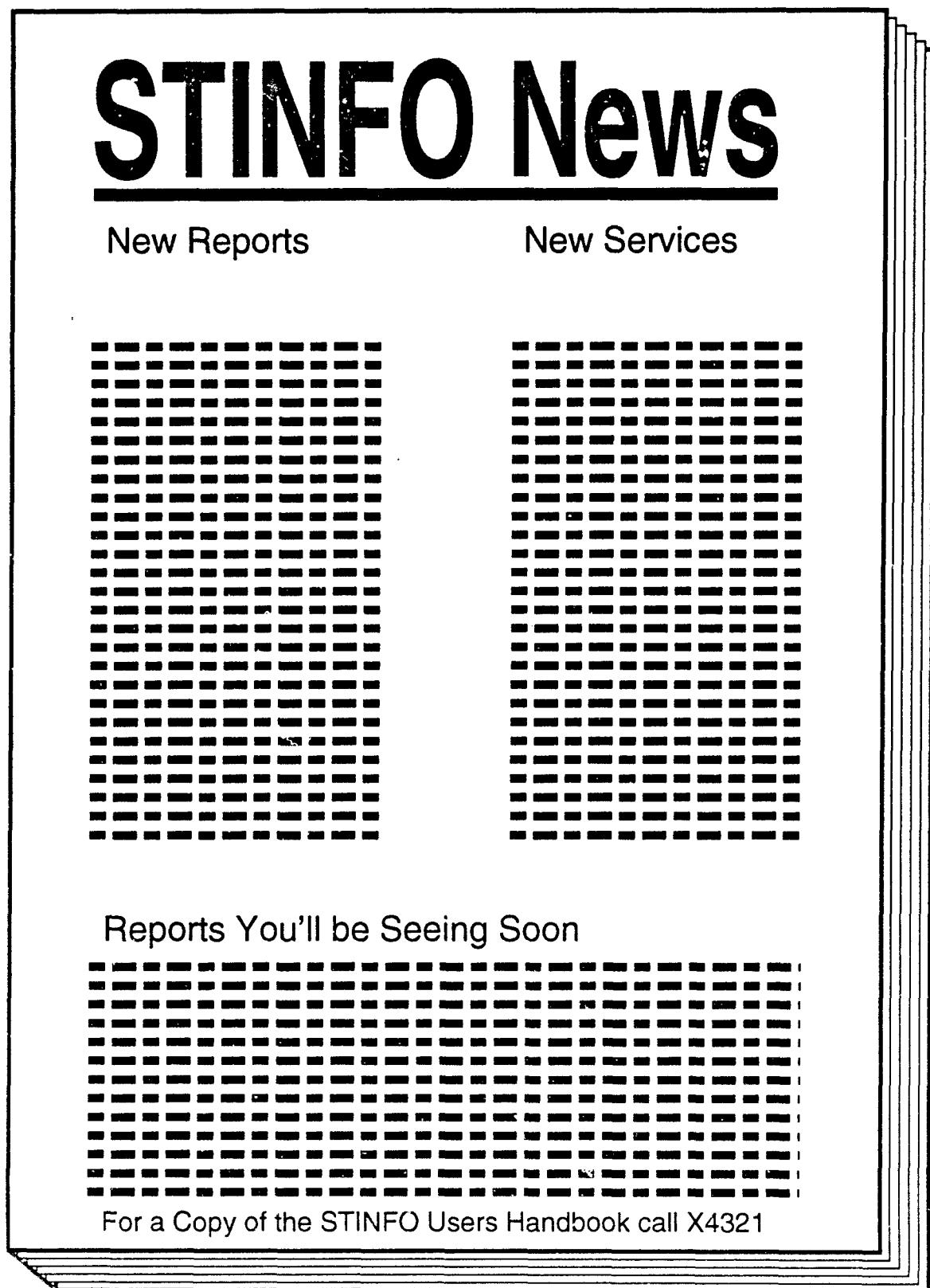


Figure 53 - STINFO News sample

19. PATTERNING

Your responsibilities as STINFO Manager require you to be familiar with and to use regulations and other documentation. Therefore, it is appropriate to provide you with a technique you can use to acquire specific information about the document contents without your having to read the entire document.

The technique described here is commonly taught to undergraduates in college.



Figure 54

The technique, which is known by many names, is called **patterning** in this chapter. Another name is **visual outlining**. Patterning is a simple and powerful technique that allows you to see the “big picture” and, hopefully, gain understanding from this insight.

To apply it, you need just a sheet of paper, a pencil, and a little thought. You are attempting to draw a diagram or picture of the document, showing its main components and ideas and the relationships between each of these elements. After the diagram is drawn, you should stand back and examine the relationship pattern. You can change relationships and add new nodes until the diagram is a true graphical representation of the concept.

Start your pattern by placing the central idea, theme, or research topic in a circle in the center of the paper. Then list the second level of related ideas in circles around the central node, connecting each of these with arrows to the central node. Add more nodes and connections around each of these nodes until the entire concept has been drawn.

The entire diagram must fit on one sheet of paper. You gain understanding by examining the diagram and the implied relationships on the one page. However, there is no limit to the size of paper that can be used.

In addition to helping you to understand any document or topic, patterning is also a powerful writing and presentation tool. Before attempting to write or present anything, draw a pattern of the topic. Once the pattern has been drawn, simply jot down your thoughts on each node, relating each one back to the central idea. When you have completed the task, a rough draft of your ideas is on paper.

During this course, you will be asked to draw patterns for a number of regulations.

If you would like to learn more about patterning, the following book is recommended: Rico, Gabriele Lusser. *Writing the Natural Way: Using Right-Brain Techniques to Release Your Expressive Powers*. J.P. Tarcher, 1983.

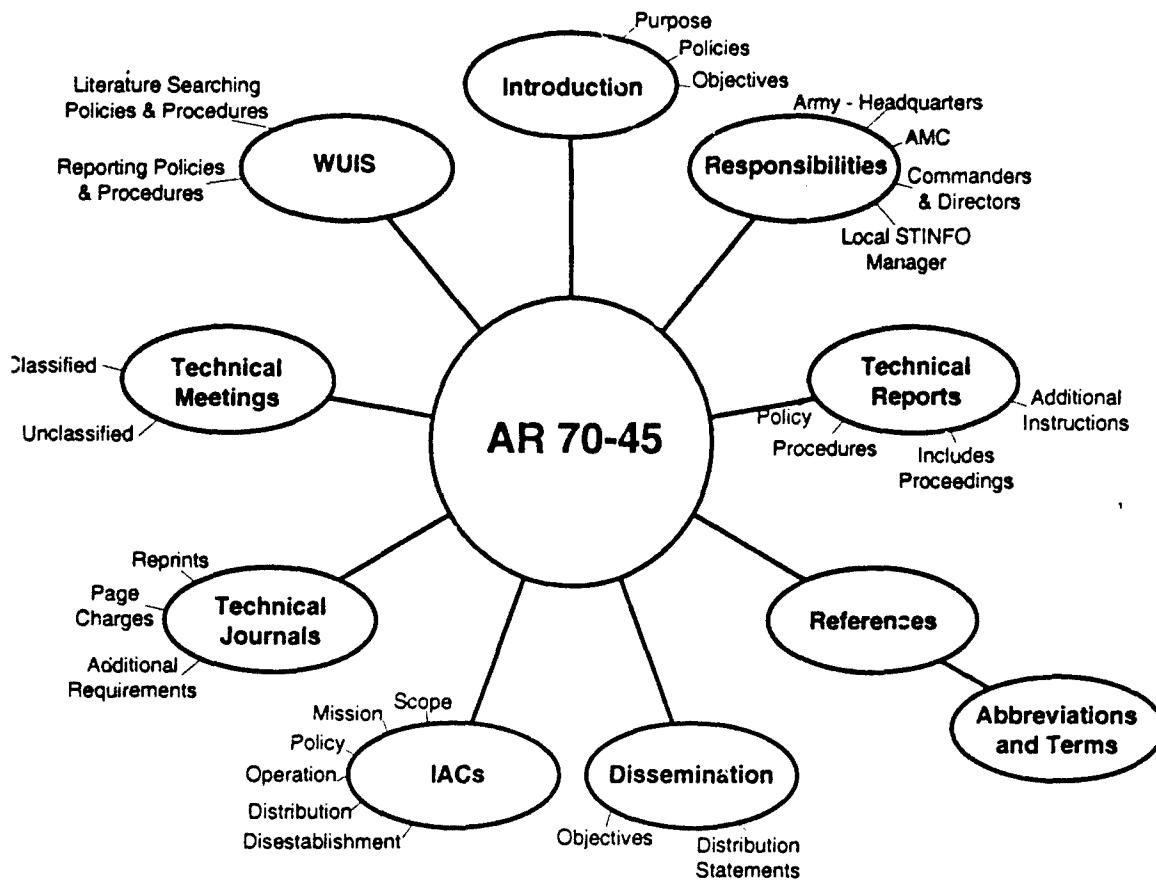


Figure 55 - A Patterning Example

20. STINFO TERMINOLOGY: ACRONYMS AND TERMS

Your job includes learning the STINFO vocabulary, which is specialized and fairly large. As you know, acronyms are used heavily in the military world and often become words themselves. Every regulation, directive, or presentation that you come in contact with will use some terminology from this list (and others, including new ones!). The following list was compiled from the source materials used to prepare this training material and serves as an introduction to STINFO terminology.

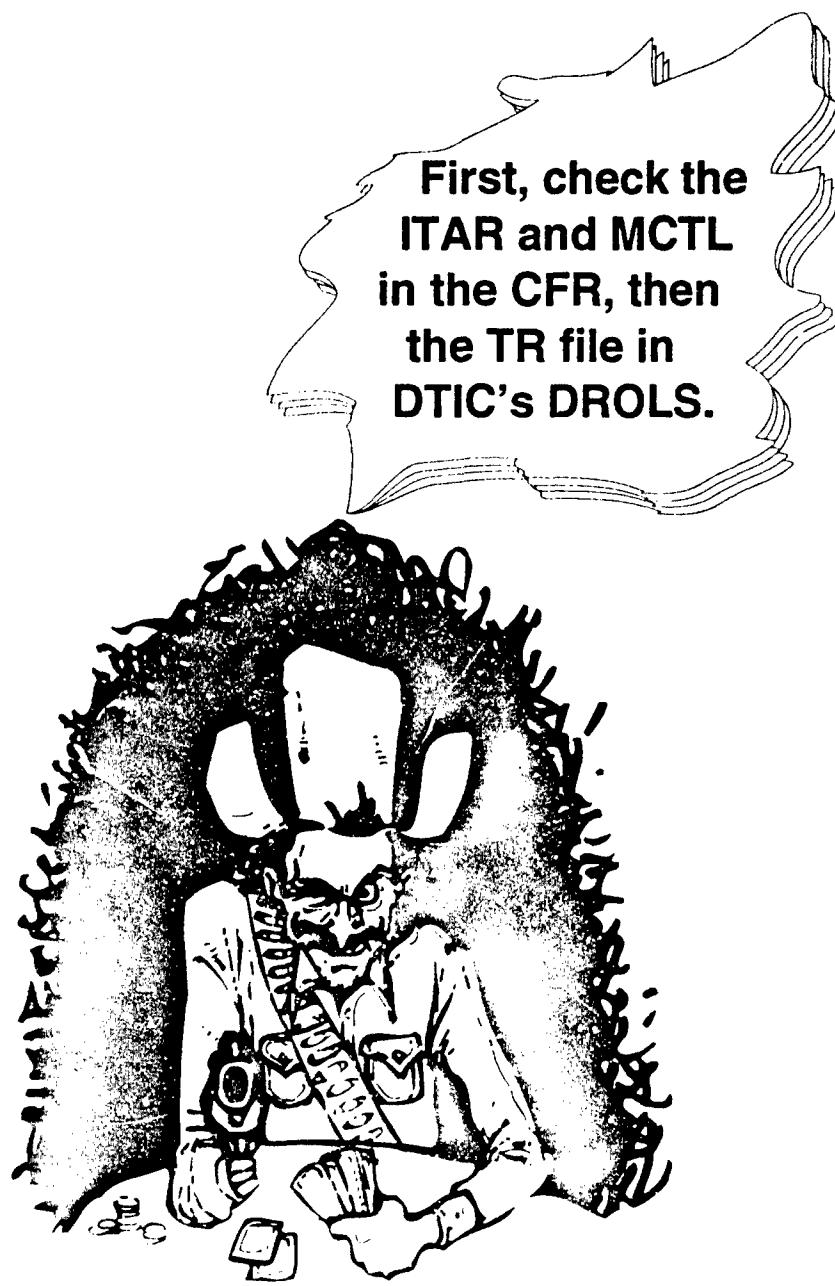


Figure 56

Abstract - A brief summary of the most significant information contained in a document.

Accession Document (AD) - The unique number DTIC assigns to each document it adds to its collection. It is used to order documents from DTIC and NTIS.

AD - see Accession Document

ADD - Automatic Document Distribution (DTIC)

Advanced Planning Briefing for Industry (APBI) - A formal briefing describing RDT&E mid - and long-range plans and programs, background information on current related programs, and details on threat, deficiencies, and doctrine. APBIs are announced in the Commerce Business Daily (CBD), and are attended by industry, members of the academic community, and representatives of cleared foreign governments.

AECA - see Arms Export Control Act

AFI - Air Force Instruction

AFIFIO - Air Force Information for Industry Office

AFPCP - Air Force Potential Contractor Program

AFPD - Air Force Policy Directive

AFP - Air Force Pamphlet

AFR - Air Force Regulation

AGARD - Advisory Group for Aeronautical Research and Development

AMC - Army Materiel Command

AMSDL - Acquisition Management System and Data Requirements Control List

AMTD - Automatic Magnetic Tape Distribution (DTIC)

ANSI - American National Standards Institute

APBI - see Advanced Planning Briefing for Industry

APCP - Army Potential Contractor Program

AP&PI - Director of Acquisition Policy and Program Integration

AR - Army Regulation

ARL - Army Research Laboratory

Arms Export Control Act (AECA) - The law codified in 22 U.S.C. 2778. The law requires a license from the Department of State to export defense articles and services, including related technical data. It is implemented by the International Traffic in Arms Regulations (ITAR).

ASO - Navy Aviation Supply Office

ATI - Air Technical Index (DTIC)

BAA - Broad Agency Announcement

CAAS - Contracted Advisory and Assistance Services

CAB - Current Awareness Bibliography (DTIC)

CBD - Commerce Business Daily

CBIAC - Chemical Warfare/Chemical and Biological Defense IAC

CCAL - see Certified Contractor Access List

CCL - see Commodity Control List

CDRL - see Contract Data Requirements List

CD-ROM - Compact Disk - Read Only Memory

CEIAC - Coastal Engineering IAC

Center for Analysis of Scientific and Technical Information - see Information Analysis Center

Central Information Reference and Control System (CIRC II) - The national system for the processing, storing, retrieval, and dissemination of foreign scientific and technical intelligence information. In addition to supporting the service intelligence agencies, the system supports all U.S. Government R&D agencies.

Certified Contractor Access List (CCAL) - A list of those contractors eligible to receive export-controlled technical data.

CFR - see Code of Federal Regulations

CG - Commanding General

CIAC - Ceramics IAC

CIRC II - see Central Information Reference and Control System

CMI - Classified Military Information

CNR - Chief of Naval Research

COCOM - see Coordinating Committee for Multilateral Export Control

Code of Federal Regulations (CFR) - The annual codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government. The Code is divided into 50 titles that represent broad areas subject to federal regulation. It is kept up-to-date by the Federal Register.

COMINT - Communications Intelligence

Commodity Control List (CCL) - A detailed listing prepared by the Department of Commerce to control the export of goods and technologies to specific countries. This list is part of the Export Administration Regulations.

COMSEC - Communications Security

Contract Data Requirements List (CDRL) - DD Form 1423 that specifies the documentation requirements (or deliverables) of a contract. It is attached to the Statement of Work in purchase request packages for proposed contracts.

Controlled Information - Information that is restricted in its dissemination: a) by security regulations; b) by proprietary, ethical, privileged, or certain administrative reasons; c) against unauthorized disclosure of certain official information; or d) for reasons requiring special access controls prescribed by existing DoD and military service regulations.

Controlling DoD Office - DoD activity, which is usually the organization that generates the information, that is responsible for the assignment of a distribution statement applied to information produced in-house, under contract, or under a grant. The controlling office also determines if the information is export-controlled.

Coordinating Committee for Multilateral Export Control (COCOM) - An international organization that cooperates in controlling the export of strategic goods and technologies.

COSATI - Committee on Scientific and Technical Information

COTR - Contracting Officer's Technical Representative

CPIA - Chemical Propulsion IAC

CRDA - Cooperative Research and Development Agreement

Critical Technology - Technologies that consist of: (a) arrays of design and manufacturing know-how (including technical data); (b) keystone manufacturing, inspection, and test equipment; (c) keystone materials; and (d) goods accompanied by sophisticated operation, application, or maintenance know-how that would make a significant contribution to the military potential of any country - or combination of countries - and the compromise of which may prove detrimental to the security of the United States. Also called militarily critical technology.

CRSTIAC - Cold Regions Science and Technology IAC

CSERIAC - Crew System Ergonomics IAC

CTIAC - Concrete Technology IAC

CUI - Controlled Unclassified Information

DA - Department of the Army

DA PAM - Department of the Army Pamphlet

DACS - Data and Analysis Center for Software (IAC)

DASIA - DoD Nuclear IAC

Data Item Description (DID) - DD Form 1664 that specifies the content and substance of each deliverable in a DoD contract.

Data Management Office or Officer (DMO) - Office responsible for the contents and format of the CDRL and for monitoring the contract deliverables.

Data Management Program - The DoD program for managing data acquired from industry under the terms of DoD contracts.

DDAL - Delegation of Disclosure Authority Letter

Defense RDT&E Online System (DROLS) - The DTIC online system that consists of the TR, IR&D, and WUIS databases.

Defense Technical Information Center (DTIC) - The focal point within DoD for the collection, storage, retrieval, and dissemination of information resulting from, or relevant to, DoD RDT&E efforts.

Development Test and Evaluation - Test and evaluation conducted to measure progress, usually of components/subsystems, and to assist the engineering design and development process and verify attainment of technical performance specifications and objectives. Usually conducted under controlled or laboratory conditions. Can be conducted before or after production begins.

DFARS - Defense Federal Acquisition Regulation Supplement

DGIS - DoD Gateway Information System (DTIC)

DIA - Defense Intelligence Agency

DID - see Data Item Description

DIS - Defense Investigative Service

Distribution Statement - A statement marked on information denoting the extent of its availability for secondary distribution without additional approvals or authorizations.

DLSC - Defense Logistics Services Center

DLSIE - Defense Logistics Studies Information Exchange

DMO - see Data Management Office or Officer

DNIS - Defense Network Information Services

Document - Any recorded information regardless of its medium, physical form, or characteristics. A document can be written or printed material, magnetic tape, computer diskette, laser disk, map, chart, photograph, negative, film, videotape, or any other media used for recording information.

DoD - Department of Defense

DoDD - Department of Defense Directive

DoDI - Department of Defense Instruction

Domestic Technology Transfer - The application of federally developed technology to a new use in the public or private sectors.

DOTRAC - Directory of Organizational Technical Report Acronym Codes (DTIC)

DRG - Defense Research Group

DROLS - see Defense RDT&E Online System

DTIC - see Defense Technical Information Center

DTT - see Domestic Technology Transfer

EAA - see Export Administration Act

EAR - see Export Administration Regulations

ECCN - Export Control Classification Number

ELINT - Electronic Intelligence

Export Administration Act (EAA) - All of the export control laws codified in 50 U.S.C. Appendix 2401-2420. These laws require a license from the Department of Commerce to export various goods and technologies to other countries. The laws are implemented by the Export Administration Regulations.

Export Administration Regulations (EAR) - The set of regulations controlling the export of various goods and technologies to other countries. These regulations are administered by the Department of Commerce and contain the Commodity Control List (CCL).

Export Control Laws - Any law controlling the export of certain goods and technologies from the U.S. A license is required to make such exports.

Facility Clearance - An administrative determination that the facility is eligible, from a security viewpoint, to access classified information of the same or lower security category as the level of clearance being granted.

FAR - Federal Acquisition Regulation

FBIS - Foreign Broadcast Information Service

FDO - Foreign Disclosure Officer

FDPO - see Foreign Disclosure Policy Office

Federal Laboratory Consortium (FLC) for Technology Transfer - An organization that supports and promotes the domestic technology transfer program. Members are from the various federal R&D laboratories.

Federal Register - The Federal Register is issued each federal working day and provides a uniform system for publishing Presidential documents, regulatory documents, proposed rules, and required notices. The general and permanent rules are codified in the Code of Federal Regulations (CFR).

FLC - see Federal Laboratory Consortium for Technology Transfer

Focal Point - The individual responsible for ensuring compliance with a set of requirements. For example, the WUIS focal point is responsible for compliance with the requirements of the Work Unit Information System.

FOIA - see Freedom of Information Act

FORDTIS - Foreign Disclosure Technical Information System

Foreign Disclosure - Sharing official military information, both classified and unclassified, with a foreign representative, such as a foreign national, foreign government, or international organization.

Foreign Disclosure Policy Office (FDPO) - The office within DoD responsible for implementing foreign disclosure policies and arranging for the release of official military information to foreign nationals, foreign governments, or international organizations.

Foreign National - A person who is not a citizen or national of, or immigrant alien to, the United States.

Foreign Representative - Either a foreign national or a representative of a foreign interest.

Freedom of Information Act (FOIA) - The legal authority under which the general public is allowed to review, inspect, and receive copies of DoD records. The FOIA is codified at 5 U.S.C. 552 and regulated by a number of DoD and military service regulations.

FTTA - Federal Technology Transfer Act of 1986

GACIAC - Guidance and Control IAC

GIDEP - see Government-Industry Data Exchange Program

Government-Industry Data Exchange Program (GIDEP) - A cooperative activity between the federal government and industry with the purpose of sharing engineering type data, e.g., test reports and safety alerts.

Government Printing Office (GPO) - The printing and document distribution arm of the U.S. Government. The GPO sells to the public many of the publications it prints, including a number of military publications.

GPO - see Government Printing Office

GRA&I - Government Reports Announcements and Index

HBCU - Historically Black Colleges & Universities

HEIAC - Hydraulic Engineering IAC

HSI - Human Systems Integration

HTMIAC - High Temperature Materials IAC

IAC - see Information Analysis Center

IDA - Institute for Defense Analysis

IFIO - see Information for Industry Office

Independent Research & Development (IR&D) - Research and development that is primarily sponsored by the contractor. It is partially funded by DoD because it has potential for DoD use.

Information Analysis Center (IAC) - An organization which provides information services in selected, highly specialized subject areas. There are 23 IACS within DoD. DTIC administers 14.

Information for Industry Office (IFIO) - DoD office providing contractor access to DoD planning and technical requirements information.

International Traffic in Arms Regulations (ITAR) - The set of regulations controlling the export of defense articles and services, including technical data, to other countries. These regulations are administered by the Department of State and contain the U.S. Munitions List.

IR&D - see Independent Research and Development

IRIA - Infrared IAC

ISTI - International Scientific and Technical Information

ITAR - see International Traffic In Arms Regulations

JPRS - Joint Publications Research Service

Material Inspection and Receiving Report - DD Form 250 used to certify that all contract requirements have been accepted.

MATRIS - Manpower and Training Research Information System (DTIC)

MCTL - see Militarily Critical Technologies List

MIAC - Metals IAC

MIL STD - Military Standard

Militarily Critical Technologies List (MCTL) - The list issued by DoD that lists technologies that DoD has determined to be crucial to U.S. military capability and, therefore, of significant value to potential adversaries.

MMCIAC - Metal Matrix Composites IAC

Monitoring DoD Activity - see Sponsoring DoD Activity

MTIAC - Manufacturing Technology IAC

NARDIC - Navy Acquisition, Research and Development Information Center

National Technical Information Service (NTIS) - The single largest source of U.S. Government-sponsored research and development information available to the public.

NAVPOC - Navy Potential Contractor Program

NAV PUBS - Naval Publications and Forms Center

NDP - National Disclosure Policy

NDPC - National Disclosure Policy Committee

Need-to-Know - The demonstration of acceptable evidence that there is a need for information in a particular subject area. Usually established by the subject fields of interest on DD Form 1540, *Registration for Scientific and Technical Information Services*.

NICRAD - Navy/Industry Cooperative Research and Development (previous name for Navy Potential Contractor Program)

DoD STINFO Manager Training Course

NPCP - Navy Potential Contractor Program

NPFC - Naval Publications and Forms Center

NTIAC - Nondestructive Testing IAC

NTIS - see National Technical Information Service

Office of Primary Responsibility (OPR) - Office responsible for carrying out a specific function.

Office of Research and Technology Applications (ORTA) - A function at each federal R&D activity to coordinate and carry out the Domestic Technology Transfer Program.

Official Material - Material that the U.S. Government has a proprietary interest in and that was prepared at the direction of the author's supervisor or as part of the author's official duties.

OFPL - Office of Federal Patent Licensing (NTIS)

ONR - Office of Naval Research

ONT - Office of Naval Technology

Open Literature - Published material, such as journal articles, cleared or released for public use.

OPNAVINST - Office of the Chief of Naval Operations Instruction

OPR - see Office of Primary Responsibility

Originating Activity - DoD activity that produces information in-house, under a contract, or under a grant.

ORTA - see Office of Research and Technology Applications

OUSD(A) - Office of the Under Secretary of Defense for Acquisition

PA or PAO - see Public Affairs Office

Page Charges - Cost of reviewing, editing, publishing, and disseminating information in a professional journal.

PCP - see Potential Contractor Program

PEDS - Program Element Descriptive Summary

PLASTEC - Plastics Technical Evaluation Center (IAC)

Policy Agreement - A formal agreement between a qualified contractor and a defense organization that establishes a legal basis for the release of information to that organization.

Potential Contractor Program (PCP) - A program that registers and sponsors access to DTIC and Information for Industry Offices for individuals and companies with the potential to become defense contractors.

PPBS - Planning, Programming, and Budgeting System (DoD)

Primary Distribution - The initial distribution of documents.

PSTIAC - Pavements and Soil Trafficability IAC

Public Affairs Office (PA, PAO) - Office primarily responsible for the Security and Policy Review of all information, including scientific and technical information, that is to be released to the public.

RAC - Reliability Analysis Center (IAC)

RDA - Research, Development, and Acquisition

RDP - see Report Document Generation Page

RDT&E - see Research, Development, Test, and Evaluation

R&DUFS - see Research and Development Unfunded Study

R&E - Research and Evaluation

Report Documentation Page (RDP) - Required form containing all the bibliographic information required for documents submitted to DTIC, i.e., SF 298, DTIC Forms 503-505.

Representative of a Foreign Interest - Citizen or national of the United States or immigrant alien who, in his or her individual capacity or on behalf of a corporation, is acting as a representative, official, agent or employee of a foreign government, firm, corporation, international organization, or person.

Research - All efforts directed toward increased knowledge of natural phenomena and environment, and efforts directed toward the solution of long term defense problems in the physical, engineering, life, behavioral, and social sciences.

Research and Development Unfunded Study (R&DUFS) - Study of an R&D problem conducted with the approval of the U.S. Government, but at no direct cost to the government.

Research, Development, Test, and Evaluation (RDT&E) - Activities for the development of a new system that include basic and exploratory research, advanced and engineering development, development and operational testing, and the evaluation of test results. Also, an appropriation category that includes funds allocated to the FYDP major force program 6.

RFP - Request for Proposal

RFQ - Request for Quotation

R&T WUIS - Research and Technology Work Unit Information System. See Work Unit Information System.

SAF/AQT - Office of the Assistant Secretary of the Air Force for Acquisition, Directorate for Science and Technology

SBIN - Shared Bibliographic Input Network (DTIC)

SBIR - see Small Business Innovation Research Program

Scientific and Technical Information (STINFO, STI) - Communicable knowledge or information resulting from or pertaining to the conduct and management of R&E efforts. STI is used by administrators, managers, scientists, and engineers engaged in scientific and technological efforts and is the basic intellectual resource for and result of such effort.

Scientific and Technical Information Activities - All management, administrative, and operational efforts directed to the planning, support, control, performance, and improvement of the processing, handling, and communication of S&T information.

Scientific and Technical Information Program (STIP) - The "umbrella" under which all DoD and military service scientific and technical information programs operate. The concepts and responsibilities of this program are detailed in DOD Directive 3200.12.

SearchMAESTRO - Menu-Aided Easy Searching Through Relevant Operations. DTIC's menu-driven online system which allows simple access to various online databases.

SECNAVINST - Secretary of the Navy Instruction

Secondary Distribution - Subsequent distribution of a document after primary distribution, usually occurring as the result of a request, and handled by a repository such as DTIC or NTIS.

DoD STINFO Manager Training Course

Security and Policy Review - Review of information proposed for public release and carried out by a Public Affairs Office.

Security Manager - The DoD individual responsible for supervising all security aspects of a classified meeting.

SF - Standard Form

Small Business Innovation Research (SBIR) Program - A U.S. Government-wide program that sets aside a percentage of all R&D monies for small businesses, who provide technological services. Governmental needs are specified in specific solicitations, and contracts are awarded from the resulting proposals.

SMIAC - Soil Mechanics IAC

Sponsoring DoD Activity - The DoD activity or office directly responsible for funding or supervising a program whether performed in-house or by contract, grant, or study agreement. Monitoring DoD activity is sometimes used to identify the supervisor of a program, separate from funding activity or office.

STI - see Scientific and Technical Information

STIISP - Scientific and Technical Intelligence Information Service Program

STINFO - see Scientific and Technical Information

STIP - see Scientific and Technical Information Program

STRN - Standard Technical Report Number

STU - Secure Telephone Unit

Study - Any organized attempt to understand complex issues, improve the quality or timeliness of policy development or decision making, or provide new insights into, alternative solutions to, or recommendations on issues through the application of scientific methods.

SURVIAC - Survivability/Vulnerability IAC

TAA - see Technical Application Assessment

TACTEC - Tactical Technology Center (IAC)

Technical Application Assessment (TAA) - A summary description of the potential application of a technology developed by the U.S. Government.

Technical Data - Recorded information, regardless of form or method of recording, that can be used, or adapted for use, to design, engineer, produce, manufacture, operate, repair, overhaul, or reproduce military or space equipment and related technology. It is also known as technical data with military or space application.

Technical Document or Publication - Any recorded information that presents STI or technical data.

Technical Information - Information, including scientific information, that relates to research, development, engineering, test, evaluation, production, operation, use, and maintenance of munitions and other military supplies and equipment.

Technical Report (TR) - A publication designed to convey the results of basic or applied research.

Technology - All scientific or engineering efforts directed toward eliminating technical barriers and providing solutions to technical problems encountered in RDT&E programs.

Technology Transfer - see Domestic Technology Transfer

TILO - Technical and Industrial Liaison Office

TIP - Technical Information Package

TIP - Technical Information Pilot

TJAG - The Judge Advocate General

TPST - Training and Personnel Systems Technology

TR - see Technical Report

U2 - see Unclassified, Unlimited

UFS - see Research and Development Unfunded Study

Unclassified, Unlimited (U2) - A common term for documents assigned distribution statement A.

USAF - United States Air Force

US Code (USC) - The listing of all United States statutes of a permanent and general nature, i.e., the "laws of the land."

U.S. Munitions List (USML) - The list of arms, ammunition, and other defense articles and services, and related technical data, that is export-controlled. This list is part of the International Traffic in Arms Regulations (ITAR).

Unofficial Material - Material prepared by civilian or military personnel as private individuals on off-duty time and in which the U.S. Government has no proprietary interest.

UP - Unsolicited Proposal

URI - University Research Initiative

Work Unit - The smallest segment into which research or technology efforts are divided for local administration or control.

Work Unit Information System (WUIS) - A system for the reporting, storage, and retrieval of technical and management data on ongoing and completed DoD research and technology efforts.

Work Unit Summary - The set of data elements that describes the what, where, for whom, by whom, for how long, for how much, and the progress of each RDT&E work effort being reported. The form used is called the WUIS Worksheet. DD Form 1498 is no longer accepted.

WUIS - see Work Unit Information System

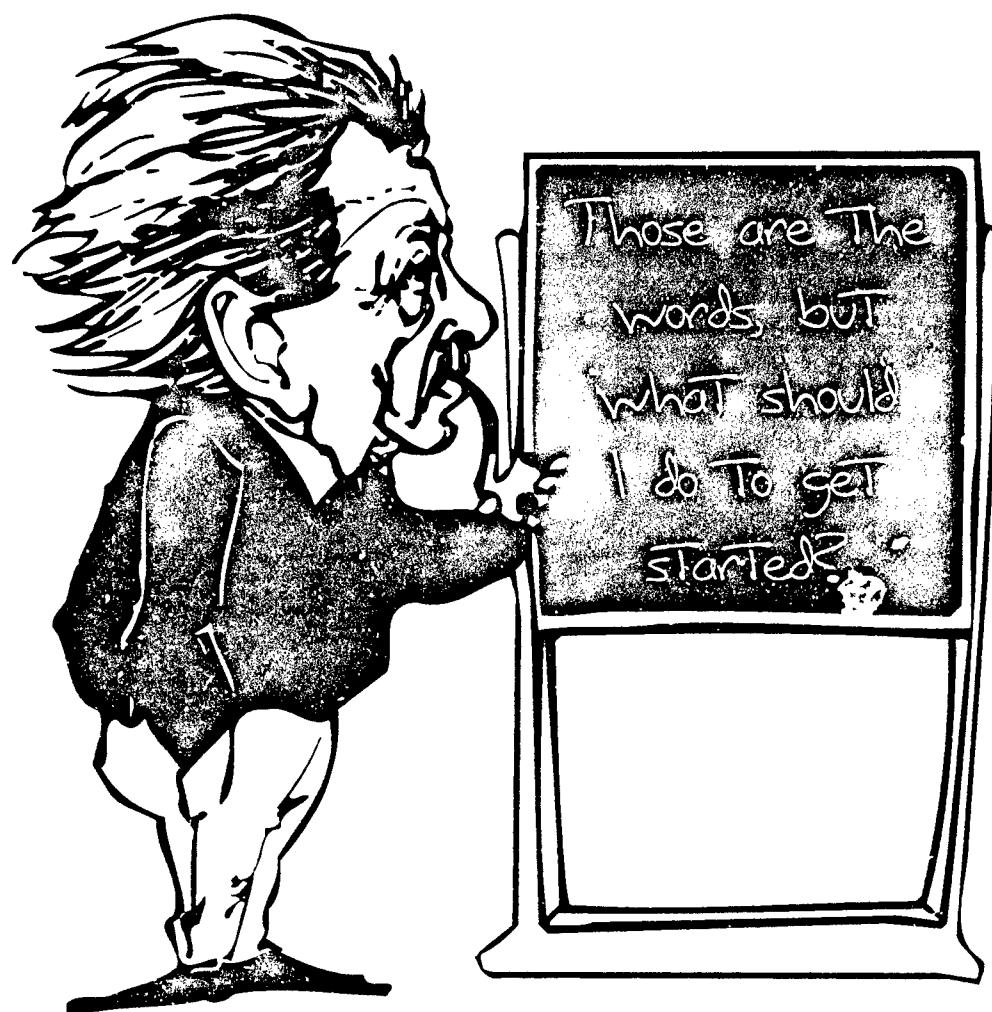


Figure 57

21. SUMMARY

In summary, there are specific steps a new STINFO Manager should take to get started. In addition, these steps serve as reminders to more experienced managers. The steps are:

1. Read and understand your service-specific STINFO regulations. Be familiar with DoD Directive 3200.12 and all other DoD regulations that apply.
2. Review the *DoD STINFO Manager Training Manual* and other material handed out during the course. Keep it at your desk.
3. Visit other STINFO offices and see how they are operated.
4. Get to know the other individuals involved in information support at your organization and establish working relationships with them. Important allies are the technical library, Data Management Office, WUIS focal point and the Public Affairs Office.
5. Plan what needs to be done and set goals.
6. Determine what needs to be done first.
7. Understand all aspects of DTIC. Register and establish all the various accounts for DTIC products and services.
8. Get your technical publication tracking system designed and working, and don't make it too fancy or involved. Make sure that you are not implementing something that already exists!
9. Get your publication processing system designed and working. Concentrate on getting the documents through your office as fast as possible! At all costs, don't become a bottleneck.
10. Get new start DTIC searches under control. Capture this information in your tracking system.
11. Write a *STINFO Users Handbook*. Include information about all policies and procedures you have in place, e.g., how to publish, how to determine export control limitations, how to sponsor a conference, and how to access all information services available at your activity, e.g., library services, online services, DTIC's services.
12. Generate monthly STINFO activity summaries.
13. Report your progress to the unit command and send a copy of the progress report to your STINFO Program Manager.
14. Network with your STINFO colleagues.
15. Call your STINFO trainer at (703) 274-7791 or DSN 284-7791.

and

**ALWAYS REMEMBER THAT IT IS NOT
YOUR JOB TO DO IT ALL. IT IS YOUR
JOB TO SEE THAT IT ALL GETS DONE.**

22. EXERCISES

CHAPTER 3 EXERCISE

1. Develop a pattern showing the components of DoDD 3200.12, *DoD Scientific and Technical Information Program (STIP)*. (23.1, Tab 1)

CHAPTER 4 EXERCISES

2.a. Summarize what you think the Air Force STINFO program is all about.

2.b. Summarize what you think the Army STINFO program is all about.

2.c. Summarize what you think the Navy STIP program is all about.

CHAPTER 5 EXERCISE

3. Develop a pattern showing the components of AFR 83-1, *U. S. Air Force Scientific and Technical Information Program.* (23.1, Tab 22)

CHAPTER 6 EXERCISE

4. Develop a pattern showing the components of AR 70-45, *Research, Development, and Acquisition Scientific and Technical Information Program*. (23.1, Tab 26)

CHAPTER 7 EXERCISE

5. Prioritize the STINFO Manager duties listed in Chapter 7 into High, Medium, and Low priorities. Use the card set to do this and record your results below.

The High Priority duties are numbers

The Medium Priority duties are numbers

The Low Priority duties are numbers

The Highest Priority duty is number

The Lowest Priority duty is number

CHAPTER 8 EXERCISES

6.a. Develop a pattern showing the components of DoD 3200.12-R-1, *Research and Technology Work Unit Information System Regulation*. (23.1, Tab 2)

6.b. Develop a pattern for Chapter 2 - *Work Unit Information Summaries* - of AR 70-45.
(23.1,Tab 26)

6.c. List the six WUIS duties that a STINFO Manager is responsible for.

CHAPTER 9 EXERCISES

7.a. Develop a pattern showing the components of AFR 83-2, *United States Air Force Technical Publications Program*. (23.1, Tab 23)

7.b. Name at least six steps in a qualitative review of a technical publication.

7.c. Develop a pattern for Chapter 4 - *Publication and Reprints of Articles in Technical Journals*
- of AR 70-45. (23.1, Tab 26)

7.d. Develop a pattern showing the components of ANSI Z39.18, *Scientific and Technical Reports - Organization, Preparation, and Production*. (23.2, Tab 22)

CHAPTER 10 EXERCISES

8.a. Develop a pattern showing the components of DoDD 5230.24, *Distribution Statements on Technical Documents*. (23.1, Tab 15)

8.b. Develop a pattern showing the components of DoDD 5230.25, *Withholding of Unclassified Technical Data from Public Disclosure*. (23.1, Tab 16)

8.c. List the three kinds of control markings and indicate briefly how they differ.

CHAPTER 11 EXERCISE

9. Prioritize the user support services listed in figure 34 on page 11-2. Can you think of any other user support services that should have been included here?

CHAPTER 12 EXERCISES

10.a. How would you describe DTIC? What should its primary function be?

10.b. Match the form numbers with the form titles by entering the form number next to the form title.

<u>Form Number</u>	<u>Form Title</u>
DD Form 254	Contract Security Classification Specification
DTIC Form 50	Contractor Data Requirements List
DD Form 1541	Registration for S&T Information Services
DTIC Form 256	Facility Clearance Register
DD Form 1423	Data Item Description
DD Form 2345	Militarily Critical Technical Data Agreement
SF 298	Document Request
DTIC Form 55	DTIC Accession Notice
DD Form 1664	Request for Release of Limited Document
DTIC Form 64	Request for DTIC Database Products
DD Form 1540	Forms Request
DTIC Form 1	Report Documentation Page

CHAPTER 14 EXERCISE

11. List eight offices or programs that a STINFO Manager interacts with.

CHAPTER 15 EXERCISE

12. How can a STINFO Manager contribute to the DoD technology transfer effort?

CHAPTER 16 EXERCISE

13. What do you think the relationship between the STINFO Office and the Technical Library should be?

CHAPTER 17 EXERCISE

14. Name several STINFO managerial responsibilities.

CHAPTER 18 EXERCISES

15.a. What are some possible ways to promote the STINFO function at your activity?

15.b. List some topics that should be included in a STINFO Users Handbook.

CHAPTER 20 EXERCISE

16. Which of the following acronyms are you familiar with? Write in the ones you know.

AD _____

AFR _____

ANSI _____

APBI _____

AR _____

CAAS _____

CCAL _____

CCL _____

CD-ROM _____

CDRL _____

CFR _____

CIRC II _____

CMI _____

COCOM _____

COMINT _____

COMSEC _____

COTR _____

CRDA _____

DA _____

DID _____

DLSIE _____

DoD STINFO Manager Training Course

DMO	_____
DoD	_____
DROLS	_____
DTIC	_____
EAR	_____
ELINT	_____
FDPO	_____
FLC	_____
FOIA	_____
GPO	_____
GIDEP	_____
IAC	_____
IFIO	_____
IR&D	_____
ITAR	_____
JPRS	_____
MATRIS	_____
MCTL	_____
NTIS	_____
OPR	_____
ORTA	_____
PA	_____
PCP	_____
PEDS	_____

RDA	_____
RDP	_____
RDT&E	_____
SBIR	_____
SECNAVINST	_____
SF	_____
STINFO	_____
STI	_____
STIP	_____
TAA	_____
TJAG	_____
TR	_____
URI	_____
U.S.C.	_____
USML	_____
WUIS	_____

DoD STINFO Manager Training Course

23. STINFO DOCUMENTATION

This chapter contains a set of the regulations, forms, and other items that a STINFO Manager needs to perform his or her responsibilities. It includes the major support documentation. The intent is to make the set as current as possible, but as you know, the DoD STIP is going through some major changes, e.g., the IR&D and WUIS programs, and documentation will change. The military services are also revising their documentation. If known, entries will indicate status of revision. The numbers in the following list refer to the tab numbers. A brief description of each item is also included. The documentation should be kept up to date and readily available for your use and others.

A bibliography of other documentation mentioned in the training manual or during the class is also included.

23.1 REGULATIONS

1. DoDD 3200.12, *DoD Scientific and Technical Information Program*. The directive defines the overall concepts and assigns responsibilities for the operation and management of the DoD STIP. It also outlines the mission and functions of the Defense Technical Information Center (DTIC). The directive and its four authorized regulations are in revision.
2. DoD 3200.12-R-1, *Research and Technology Work Unit Information System Regulation*. The regulation defines the policy, scope, and responsibilities for providing complete and timely input to the R&T WUIS database. DoD 3200.12-M-1, *WUIS Input Manual (Draft)*, is the authorized manual. DLAM 4185.4, *R&T Work Unit Information System Users Manual*, is also available. Publications will be revised because of the WUIS redesign.
3. DoD 3200.12-R-2, *Centers for Analysis of Scientific and Technical Information Regulation*. The regulation prescribes policy and procedures to be followed in establishing, disestablishing, and operating Information Analysis Centers (IACs).
4. DoD 3200.12-R-4, *Domestic Technology Transfer Program Regulation*. The regulation establishes the DoD Domestic Technology Transfer Program .
5. DoDI 3204.1, *Independent Research and Development*. The instruction assigns IR&D responsibilities, sets policy and procedures, and establishes certain working groups. There are a number of supporting documents. DLAM 4185.9, *Independent Research and Development Database Input Manual*, is in draft form. DTICH 4185.5, *Independent Research and Development Contributing Organizations*, is available to only DoD classified sites. DLAM 4185.11, *Independent Research & Development Users Manual*, contains information about the system and the different reports that can be ordered. *PC IR&D Software User Guide* is in draft form.
6. DoDD 4205.2, *Acquiring and Managing Contracted Advisory and Assistance Services (CAAS)*. The regulation was reissued in FY92 and updates policy, responsibilities, and procedures for a disciplined approach to the management, acquisition, studies, and analyses, and use of CAAS resources to meet DoD requirements. CAAS include studies and analyses.

7. DoDD 5200.1, *DoD Information Security Program*. The directive defines the policy, procedures, and responsibilities for controlling classified information. There are four authorized regulations, including DoD 5200.1-R.
8. DoD 5200.1-PH, *A Guide to Marking Classified Documents*. The pamphlet is authorized by DoDD 5200.1 and provides a general guide to classification markings.
9. DoDD 5200.12, *Conduct of Classified Meetings*. The directive was reissued in FY92 and specifies policies, procedures, and responsibilities for conducting classified technical meetings.
10. DoDI 5200.21, *Dissemination of DoD Technical Information*. The instruction provides policy and assigns responsibilities for the dissemination of DoD technical information. It also establishes certification procedures that describe how to obtain access to DoD technical information with DTIC as the administering agency. This instruction never became DoD 3200.12-R-3 and is presently part of a draft consolidation with DoDD 5230.24 and DoDD 5230.27.
11. DoDD 5220.22, *DoD Industrial Security Program*. The regulation establishes the Defense Industrial Security Program and sets policy for the release of classified information to industry. There are four authorized regulations, including DoD 5220.22-R and DoD 5220.22-M, *Industrial Security Manual for Safeguarding Classified Information*.
12. DoDD 5230.9, *Clearance of DoD Information for Public Release*. The directive governs the Security and Policy review of all DoD information proposed for release to the public.
13. DoDD 5230.11, *Disclosure of Classified Military Information to Foreign Governments and International Organizations*. The directive prescribes policy, responsibilities, and procedures for the disclosure of classified military information to foreign governments and international organizations. The directive was reissued in FY92. It canceled DoDI 5230.17, incorporating and expanding on the procedures.
14. DoDI 5230.20, *Visits and Assignments of Foreign Representatives*. The instruction was reissued in FY92 with a new title and updates policy and responsibilities governing visits by foreign representatives and the assignment of foreign nationals to DoD Components. The reissue also establishes the International Visits Program (IVP) and the Defense Personnel Exchange Program (DPEP).
15. DoDD 5230.24, *Distribution Statements on Technical Documents*. The directive establishes the DoD distribution statement system, including controls for export-controlled information. The directive is presently part of a draft with DoDI 5200.21 and DoDD 5230.27.
16. DoDD 5230.25, *Withholding of Unclassified Technical Data from Public Disclosure*. The directive implements the DoD authority to withhold from public disclosure technical data that is determined to be export-controlled.

17. DoD 5230.25-PH, *Control of Unclassified Technical Data with Military and Space Application*. The pamphlet is a clear and concise guide to the implementation of DoDD 5230.24 and DoDD 5230.25.
18. DoDI 5230.27, *Presentation of DoD-Related Scientific and Technical Papers at Meetings*. The directive is presently part of a draft with DoDI 5200.21 and DoDD 5230.24.
19. DoDD 5400.7, *DoD Freedom of Information Act Program*. The directive authorizes DoD 5400.7-R, the single DoD regulation on the FOIA program.
20. DLAM 4185.16, *Certification and Registration for Access to DoD Scientific and Technical Information*. The manual establishes the procedures that allow U.S. Government agencies, their contractors, subcontractors, and grantees, and potential contractors to become certified and registered to obtain access to STI available from DTIC. Access is at different levels and types of data. There is also DLAR 4185.10. It is a tri-service regulation - AFR 80-39, AR 70-21, and OCNRINST 3900.1 - and is currently in draft form. A helpful hints sheet is included.
21. MIL STD 1806, *Marking Technical Data Prepared by or for the Department of Defense*. The standard provides procedures for the marking of unclassified/limited technical data with distribution and export control statements. It is included in contracts as the marking authority. It answers questions about what should be marked, where the markings should be placed, and how to determine export-controlled data. A second edition is expected during FY93 and will include a number of changes.
22. AFR 83-1, *U.S. Air Force Scientific and Technical Information Program*. The regulation describes the AF STINFO Program, assigns responsibilities, explains how it is organized and conducted, and tells how STINFO resources are to be managed. It is the most important regulation for the AF STINFO Manager. There are nine supporting regulations. All the regulations are being revised or will be canceled. The regulations will also become policy directives or instructions in the new structure of Air Force publications.
23. AFR 83-2, *United States Air Force Technical Publications Program*. The regulation provides policy and assigns responsibilities for the preparation, processing, and distribution of AF technical publications generated in-house or by contract or grant.
24. AFR 83-3, *Marking Technical Documents*. The regulation establishes policies and procedures for marking AF technical documents for controlled distribution or release to the public.
25. AFR 83-6, *Sponsoring or Cosponsoring, Conducting, and Presenting DoD-Related Scientific Papers at Unclassified and Classified Conferences, Symposia, and Other Similar Meetings*.
26. AR 70-45, *Research, Development, and Acquisition Scientific and Technical Information Program*. The regulation describes the Army STINFO Program, assigns responsibilities, explains how it is organized and conducted, and how STINFO resources are to be managed. It is the most important regulation for the Army STINFO Manager. It is in draft form and will replace seven current regulations.

27. SECNAVINST 3900.43, *Navy Scientific and Technical Information Program (STIP)*. The instruction provides guidance on the Navy STIP. It is the most important regulation for Navy STIP focal points. It is in draft form.
28. AMC-PAM 70-6, *Research and Development Opportunities with the U.S. Army Material Command*. The guide contains information on the various Army information for industry programs. The information is of interest to DoD-wide activities.
29. *Army Potential Contractor Program: Standing Operating Procedure for APCP Coordinators*. This guide contains basic information on the APCP and includes detailed instructions on how to register. The information is of interest to DoD-wide activities. It is in draft form.
30. LABCOM-P 1-1, *Conference Security Guidelines*. The pamphlet is a Army Laboratory Command guide to planning classified and unclassified technical meetings. The information is of interest to DoD-wide activities.

23.2 FORMS AND OTHER DOCUMENTATION

1. DD Form 250, *Material Inspection and Receiving Report*. This form is used to accept the required deliverables on a contract. By signing it, the sponsoring organization acknowledges that the items conform with the quality and quantity requirements of the contract.
2. DD Form 254, *Department of Defense Contract Security Classification Specification*. This form is used to specify the classification level access required on a contract and is also part of a Potential Contractor Program agreement.
3. DD Form 1423, *Contract Data Requirements List (CDRL)*. This form is used when technical data is required under a contract and specifies all the required deliverables. There are one, two, and four data item CDRLs. It is completed by the person who is responsible for the data requirements of the contract, with the assistance of the Data Manager, and is processed by the contracting office. An example of a completed CDRL is included.
4. DD Form 1540, *Registration for Scientific and Technical Information Services*. This form is used to register for DTIC products and services. It determines the duration of the registration and subject fields of interest. It is the only registration form required for DoD and other U.S. Government agencies and must be submitted annually. For contractors, the form allows access to unclassified/unlimited services. A separate form must be completed for each contract or grant, and the registration is in force for the length of the contract. A helpful hints sheet is included.
5. DD Form 1541, *Facility Clearance Register*. This form is submitted by a contractor facility to DTIC to enable it to have access to classified services. The facility must be cleared up to the level of the requested classified materials. The form is processed by the Defense Investigative Service.

6. DD Form 1664, *Data Item Description (DID)*. This form states the required specifications for each deliverable on a contract. The DID number is referenced on the CDRL. For example, DI-MISC-80711, Scientific and Technical Reports, specifies that ANSI Z39.18-1987 will be used for document format. By accepting the contract, the contractor has committed to the specifications. Three technical publication DIDs are included.
7. DD Form 2345, *Militarily Critical Technical Data Agreement*. This form is required for access to export-controlled technical data, including DTIC products, by contractors. The form is submitted to the Defense Logistics Services Center (DLSC), Battle Creek, MI. Certified contractors are eligible to receive export-controlled technical data for a renewable period of five years, and their names are placed on the Certified Contractor Access List (CCAL). The form is also required for access to classified and unclassified/limited information (including DROLS) at DTIC. Two helpful hints sheets are included.
8. DTIC Form 1, *Document Request Form*. This form is used to order reports from the DTIC collection. Document orders can also be placed through DROLS or by telephone, letter, FAX, or E-Mail.
9. DTIC Form 6, *Deposit Account Notification Form*. This form is used to register NTIS deposit accounts with DTIC. This number must be on file before any DTIC order can be processed.
10. DTIC Form 50, *DTIC Accession Notice*. Contributors who want to know the accession number (AD) DTIC assigns to the document being submitted, should send both this form and the document to DTIC. DTIC will write the assigned accession number on the form 50 and return the form to the contributor.
11. DTIC Form 55, *Request for Release of Limited Document*. This form is used to request access to a limited document when the requester does not meet the requirements of the distribution statement. The form is submitted to the Controlling DoD Office responsible for determining if the specified document should be released. A helpful hints sheet is included.
12. DTIC Form 64, *Request for DTIC Database Products*. This form is used to request a search of a DTIC database or to subscribe to the Current Awareness Bibliography (CAB) or Recurring Reports services.
13. DTIC Form Letter 88, *Request for Scientific and Technical Report*, is used by DTIC to order publications that are not in the DTIC collection.
14. DTIC Form 256, *Forms Request*. This form is used to order quantities of the standard DTIC forms. Orders for forms may also be placed by telephone or FAX.
15. DTIC Form 271, *Independent Research and Development Data Sheet*. The information on this form is submitted by contractors to DTIC for inclusion in the IR&D database. Submission is by diskette or magnetic tape only because DTIC no longer accepts hard copy submissions. The form should be considered an input worksheet and not an official form.

16. DTIC Forms 503, 504, and 505

DTIC Forms 503, *Videorecording Report Documentation Page*. This form is used to submit recordings on which visual images have been registered to DTIC. It provides a one page summary of the bibliographic information and physical characteristics of the particular videorecording. An example of a completed form is included.

DTIC Form 504, *Computer Diskette Documentation Page*. This form is used to submit documents, software, data files, and databases on computer diskette or CD-ROM to DTIC. It provides a one page summary of the bibliographic information and physical characteristics of the particular computer product. An example of a completed form is included. There is also a helpful hints sheet.

DTIC Form 505, *Magnetic Tape Documentation Page*. This form is used to submit documents, software, data files, and databases on magnetic tape to DTIC. It provides a one page summary of the bibliographic information and physical characteristics of the particular magnetic tape product. A sample of a completed form is included

A chart showing the nonprint formats received and distributed by DTIC, and current prices is included.

17. SF 298, *Report Documentation Page*. This form is used to submit paper and microfiche documents to DTIC. It replaced the DD Form 1473. It provides a one page summary of the bibliographic information for the particular document. The form is not available from DTIC and must be ordered from GSA. A sample of a completed form is included.
18. *Work Unit Information System (WUIS) Worksheet*. This worksheet is used to submit information to the WUIS. With the redesign, the DD Form 1498 is no longer used. Submission is by a PC-based input system or by magnetic tape only since DTIC no longer accepts hard copy submissions. There is no form number. A sample of a completed form is included.
19. FAR 35.010. This section is entitled *Scientific and Technical Reports* and, among a number of provisions, requires: a) a contractor to furnish a report as the permanent record of the work accomplished under a R&D contract; b) copies to be submitted to DTIC; and c) the SF 298 should be submitted when agencies require that completed reports be covered by a report documentation page.
20. DFAR 237.206, *Advisory and Assistance Services*. This section states that on the acquisition for studies, the purchase request package must contain a signed statement that: a) DTIC and other information sources have been queried; 2) evidence of those queries are on file; and c) no existing scientific and technical report could fulfill the requirement.
21. *Notice to Accompany the Dissemination of Export-Controlled Technical Data*. This notice must accompany any export-controlled information that is distributed to qualified U.S. contractors. All export-controlled documents distributed by DTIC contain the notice.

22. ANSI Z39.18-1987, *Scientific and Technical Reports - Organization, Preparation, and Production*. This standard replaced MIL-STD-847B, *Format Requirements for Scientific and Technical Reports Prepared by or for the Department of Defense*, and is the recommended guideline for publishing technical publications.
23. ANSI Z39.23-1990, *Standard Technical Report Number (STRN) Format and Creation*. This standard provides a uniform format for the assignment of report numbers to technical publications and is the recommended guideline.
24. DoD Information for Industry Offices/Potential Contractor Program Focal Points.
25. Example of a Technology Application Assessment (TAA). A TAA is a summary description of the potential application of a technology developed at a federal laboratory.
26. Ordering STINFO documentation (military activities only). The list is a selection of addresses and telephone numbers.
27. USAF STINFO Management Bibliography. During 1990, a series of office management reports were produced by the office of the AF STINFO Program Manager in paper, computer diskette, and videorecording formats. AD numbers are included.
28. NASA/DoD Aerospace Knowledge Diffusion Research Project Publications. This project, started in 1989, is exploring the diffusion of STI throughout the aerospace industry. There are four phases and reports are available for phases one through three. Phase one studied the information-seeking methods of U.S. aerospace engineers and scientists. Phase two addressed the transfer of STI in government and industry and the role of librarians and technical information specialists in that transfer. Phase three looked at the use of STI in the academic aerospace community. Phase four is examining knowledge production, use, and transfer of STI among non-U.S. aerospace organizations and aerospace engineers and scientists. The list of available reports and papers includes AD numbers.
29. 1992 *NTIS Catalog of Products and Services*.

23.3 BIBLIOGRAPHY

1. *Acquisition Management Systems and Data Requirements Control List (AMSDL)* is the official listing of all data item descriptions (DIDs) that have been cleared for DoD contractual use. (DoD 5010.12-L)
2. *Air Force Systems Command Domestic Technology Transfer Handbook* is a very useful overview of technology transfer. It includes examples of forms, agreements, etc.
3. *Alerts* are failure information announcements issued by the Government-Industry Data Exchange Program (GIDEP). *Safe-Alerts* are announcements on safety problems for personnel or risk of damage to facilities or equipment.

4. *Catalog of Government Inventions Available for Licensing* is an annual compilation of the inventions announced in the NTIS Alert on Government Inventions for Licensing. It has been published since 1981 and previous years are available. (NTIS, PB92-100171CAU, 1991 edition)
5. *Certified Contractor Access List (CCAL)* is a quarterly microfiche listing of all contractors that are certified to receive export-controlled information. It is maintained by the Defense Logistics Services Center (DLSC) in Battle Creek, MI.
6. *Code of Federal Regulations* is the codification of the general and permanent rules published by the executive departments and agencies of the U.S. Government in the *Federal Register*. The Code is divided into 50 titles, which represent broad areas subject to federal regulation, and each title is further divided into chapters, which usually bear the name of the issuing agency. Each chapter is further divided into parts covering specific regulatory areas. Of interest to the STINFO Manager are the International Traffic in Arms Regulations (22 CFR Parts 120-130) and the Export Administration Regulations (15 CFR Parts 768-799).
7. *Consolidated Index of Army Publications and Blank Forms* is the complete list of Army administrative publications. It is published annually in microfiche format only with quarterly updates as needed. (DA PAM 25-30) (It is available through Army publication channels and from NTIS on a subscription basis.)
8. *Contributors' Handbook* (DTIC) is a companion to the *Handbook for Users* and describes how to submit documents, work unit summaries, and other items to DTIC. (DTICH 4185.2)
9. *Defense Science and Technology Strategy* is an overview of the new DoD science and technology strategic plan, including the seven new S&T "thrusts." (AD-A253 691)
10. *DGIS Users' Guide* (DTIC) is an extensive introduction and reference to DGIS and covers all major features.
11. *Directory of Design Support Methods* (DTIC) was developed by DoD, NASA, and industry members of the DoD Human Factors Engineering Technical Group and produced by the MATRIS Office. It contains descriptions of tools and techniques that have been developed to analyze and assess Human Systems Integration (HSI) concerns. (AD-A229 180)
12. *Directory of DoD Engineering Data Repositories* is a listing of all engineering data repositories within DoD. These repositories are archives for engineering data after the close of a project.
13. *Directory of DoD-Sponsored R&D Databases* (DTIC) is a central reference guide to DoD information sources and databases - "a database of all R&D databases". It is limited to U.S. Government agencies and their contractors. The information will be available online in the future. (AD-B116 400).
14. *Directory of Federal Laboratory and Technology Resources* is a biennial containing detailed summaries on over 1,000 laboratories and other technology resources. It includes a list of technology transfer offices. (NTIS, PB90-104480CAU, 1990-91 edition)

15. *Directory of Online Databases* is one of the best listing of currently available databases. It is published by Gale, and the current edition is dated January, 1992.
16. *Directory of Organizational Technical Report Acronym Codes (DOTRAC)* (DTIC) is a guide to acronyms used in the report numbers assigned by organizations who submit documents to DTIC. (AD-A237 000)
17. *Directory of the DoD Information Analysis Centers* (DTIC) is a booklet that provides profiles of each of the 23 IACs supported by DoD, along with useful information on costs, products, and services. It is updated regularly.
18. *DoD Directives System Annual Index* is the listing of all DoD directives, instructions, and publications. It is published annually in January with quarterly updates. (DoD 5025.1-I) (It is available through DoD publication channels and from NTIS on a subscription basis.)
19. *DoD Key Technologies Plan* is an overview of the 11 technologies that support the seven new S&T "thrusts." (AD-A253 692)
20. *DROLS Retrieval Reference Guide* (DTIC) is a pocket-sized guide to DROLS commands and fields. (DLAM 4185.21)
21. *DROLS Handbook* (DTIC) is the text for the DROLS training classes.
22. *DROLS Workbook* (DTIC), dated Jan 92, is a handy publication full of practical exercises and problem sets to assist users in learning DROLS. (AD-A259 033)
23. *DTIC Cataloging Guidelines* is the cataloging manual used at DTIC and is based on CENDI cataloging rules, which were developed by several federal agencies, i.e., NASA, NTIS, DOE, and DoD. It is usually updated annually. (AD-A246 500)
24. *DTIC Digest* is a quarterly newsletter, including feature articles on DTIC's special programs, developments of interest to the user community, searching hints, calendar of events, etc.
25. *DTIC Referral Database Directory* contains specialized STI sources operated or supported by DoD and other U.S. Government agencies. The information will be available online in the future. (AD-A241 750)
26. *DTIC Research and Development Project Summaries* is published annually and provides brief descriptions of the current projects within the Directorate of Information Science and Technology.
27. *DTIC Telephone Index* is updated annually.
28. *DTIC Thesaurus* is DTIC's vocabulary for indexing and retrieving information in the DTIC databases. It is a very important tool to use when searching the DROLS databases, assigning subject terms, etc. It is available in paper and on diskette. Both 3 1/2 and 5 1/4 diskette versions are available. (paper: AD-A226 000; diskettes: AD-M000 125 through AD-M000 129)

29. *The DTIC Users Exchange, The DUC Letter* is a newsletter published irregularly issued by the DTIC Users Council.
30. *Government Information Quarterly* (vol. 8, number 2, 1991) is a symposium issue on the USAF STINFO Program.
31. *Government Reports Announcements and Index* is a periodical published by NTIS. It is published semi-monthly and summarizes all the new titles added to the NTIS collection since the previous issue.
32. *Handbook for Users* (DTIC) is the basic overall guide to DTIC and its products and services. (DTICH 4185.1)
33. *How To Get It - A Guide to Defense-Related Information Resources* (DTIC) is probably the most popular DTIC publication. It identifies sources of government information of interest to the defense community. The cited documents are frequently only available from the responsible office. (AD-A256 150)
34. *Information Analysis Centers in the Department of Defense* is an in-depth report on IACs. (AD-A184 002)
35. Institute for Defense Analyses Report Series on Information Analysis Centers (IACs). See Chapter 16.7.4 for list of titles and assigned AD numbers.
36. *Introduction to DROLS Database Searching* (DTIC) is an interactive computer-assisted instructional program that serves as an overview for new or prospective DROLS users. It is on a 5 1/4 diskette, uses MS/DOS operating software, and is available for both monochrome and color monitors.
37. *Introduction to the Department of Defense Gateway Information System (DGIS)* (DTIC) is an interactive computer-assisted instructional program that provides an overview of the main features and capabilities of DGIS. It is available in both 3 1/2 and 5 1/4 diskette versions, uses MS/DOS operating software, and can be used on both monochrome and color monitors.
38. *Keeping You Informed* (DTIC) is a timely flyer informing DTIC users of new products, etc.
39. *MATRIS Research Directory for Manpower, Personnel, Training, and Human Factors* (DTIC) lists individuals who perform or manage current people-related Training and Personnel Systems Technology (TPST) R&D for the DoD. It is updated annually. (AD-A239 694)
40. *MATRIS Training and Personnel Systems Technology (TPST) R&D Program Description* (DTIC) is a comprehensive summary of the Manpower, Personnel, and Training Program. It is updated annually. (AD-A238 534)

41. *Militarily Critical Technologies List (MCTL)* is a detailed discussion of the existing technologies that DoD has determined to be crucial to U.S. military capability and of significant value to potential adversaries. It is not intended to replace the export control lists but facilitates the use of the lists. It can, however, be cited as the authority to withhold technical data associated with defense goods. The number of technologies has remained constant at 20 since 1986. The MCTL is in continuous review and revision and published every two to three years. The 1992 edition is the current one. DTIC does not have the 1989 edition.
42. *Navy Domestic Technology Transfer Fact Sheet* is a monthly newsletter highlighting recently developed Navy technology and other items of interest. It is published by the Naval Surface Warfare Center, Dahlgren Div., Dahlgren, VA, (703) 663-8921 or DSN 249-8921.
43. *Navy Stock List of Publications and Forms* is a microfiche listing of all public release Navy publications and forms. It is published three times a year. (NPFC PUB 2002F) (It is available from ASO Naval Publications and Forms and from NTIS on a subscription basis.)
44. (Navy) *Unabridged Navy Index of Publications and Forms* is the limited version of the microfiche index. It is published three times a year. (NPFC PUB 2002D) (It is available from ASO Naval Publications and Forms.)
45. *Notices of Changes in Classification, Distribution, and Availability* (DTIC) is a quarterly publication listing classification, distribution, and availability changes for documents. It is only available on microfiche.
46. *NTIS Alert on Government Inventions for Licensing* is a bimonthly bulletin that announces new inventions from federal laboratories. (NTIS, subscription)
47. *NTIS - The Competitive Edge* is an eight minute promotional videotape of NTIS and its activities. (NTIS, PR-858, complimentary)
48. *Numerical Index of Standard and Recurring Air Force Publications* is the listing of all Air Force publications. It is published quarterly. (AFR 0-2) (It is available through Air Force publication channels and from NTIS on a subscription basis.)
49. *Official Gazette of the U.S. Patent and Trademark Office* is a weekly abstract that announces all newly issued patents.
50. *Program Element Descriptive Summary* provides narrative information on service related RDT&E Program Elements and Projects for each FY, provided to Congress during hearings. Copies are available from DTIC.
51. *SBIR Abstracts of Phase I and Phase II Awards* are a series of publications that present the technical abstracts of the proposals that resulted in contract awards. Copies of the publications are available from DTIC.

52. *SBIR Pre-Solicitation Announcement* is a quarterly publication that provides advance information on upcoming SBIR solicitations, SBIR eligibility requirements, upcoming conferences, etc. The quarterly is available from the Office of Innovation, Research and Technology, U.S. Small Business Administration, 409 Third Street, Southwest, 8th Floor, Washington, DC. 20416 (202) 205-7777.
53. *SBIR Program Solicitation* is issued at the beginning of each DoD solicitation period. The publication provides all the information needed to submit proposals under the DoD program. The publication is available from DTIC in paper (no cost) and 3 1/2 high density diskette.
54. *Small Business Guide to Federal R&D Funding Opportunities* is a primer on doing business with the U.S. Government, including technology transfer opportunities. It is available from the National Science Foundation, (202) 653-5002.
55. *Source Header List* (DTIC) is a two volume set that lists the corporate authors used in the DROLS databases. Each source name is assigned a code. This is a companion publication to the Source Hierarchy List. (AD-A256 000, AD-A256 001)
56. *Source Hierarchy List* (DTIC) is a three volume set that lists the corporate authors used in the DROLS databases in a hierarchical arrangement. (AD-A256 100, AD-A256 101, AD-A256 102)
57. *STI Handbook: Guidelines for Producing, Using, and Managing Scientific and Technical Information in the Department of the Navy*. This is one of the best STI guidebooks. (Naval Command, Control and Ocean Surveillance Center, RDT&E Division, TD 2210, Feb 92) (AD-A252 439)
58. *Subject Categorization Guide for Defense Science and Technology* (DTIC) is a detailed listing of the subject categories used to identify the major subject areas of a document and to establish contractor need-to-know on the DD Form 1540. (AD-A172 650)
59. *Subject Term Frequency Counts for DoD Information Analysis Centers* (DTIC) is a listing of subject terms and frequency counts for the IAC documents in the TR database. It is an important reference tool to use when searching for subjects related to IACs. (DTIC 4185.9)
60. *User's Guide for SearchMAESTRO* (DTIC) gives an overview of the system and its major features.